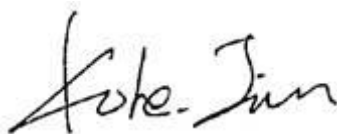


# TEST REPORT

**Application No.:** GZEM2002010593CR  
**Applicant:** Logistics and Supply Chain MultiTech R&D Centre Limited  
**Address of Applicant:** Units 1101-1105 and 1109, Level 11 Cyberport 2, 100 Cyberport Road, Hong Kong  
**Manufacturer:** The same as applicant  
**Address of Manufacturer:** The same as applicant  
**Factory:** Jetta (China) Industries Co., Ltd.  
**Address of Factory:** 333 Cai Xin Lu, Lan He Zhen, Nan Sha Qu, Guangzhou, China  
**Equipment Under Test (EUT):**  
**EUT Name:** Sensing Monitoring  
**Model No.:** Coordinator  
**Trade Mark:** LSCM  
**Standard(s):** 47 CFR Part 15, Subpart C 15.247  
**Date of Receipt:** 2020-03-09  
**Date of Test:** 2020-03-16 to 2020-04-02  
**Date of Issue:** 2020-05-18

<b>Test Result:</b>	<b>Pass*</b>
---------------------	--------------

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



Kobe Jian  
 EMC Laboratory Manager



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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2020-05-18		Original

<b>Authorized for issue by:</b>			
<b>Tested By</b>			2020-03-16 to 2020-04-02
	<b>Kevin_Zhang/Project Engineer</b>		<b>Date</b>
<b>Checked By</b>			2020-04-07
	<b>Jerry_Chan /Reviewer</b>		<b>Date</b>



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## 2 Test Summary

Radio Spectrum Technical Requirement				
Item	Standard	Method	Requirement	Result
Antenna Requirement	47 CFR Part 15, Subpart C 15.247	N/A	47 CFR Part 15, Subpart C 15.203 & 15.247(c)	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207	Pass
Minimum 6dB Bandwidth	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.8.1	47 CFR Part 15, Subpart C 15.247a(2)	Pass
Conducted Peak Output Power	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.9.1	47 CFR Part 15, Subpart C 15.247(b)(3)	Pass
Power Spectrum Density	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.10.2	47 CFR Part 15, Subpart C 15.247(e)	Pass
Conducted Band Edges Measurement	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.13.3.2	47 CFR Part 15, Subpart C 15.247(d)	Pass
Conducted Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 11.11	47 CFR Part 15, Subpart C 15.247(d)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.10.5	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart C 15.247	ANSI C63.10 (2013) Section 6.4,6.5,6.6	47 CFR Part 15, Subpart C 15.209 & 15.247(d)	Pass



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## 4 General Information

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

Power Supply:	DC5V (micro-USB port) or 24V (DC Jack Port)
Test Voltage:	AC 120V 60Hz powered by adapter (output: DC 5V) & DC power (output: DC 24 V) refer to section 4.2.
Port:	USB-A port for 5V power supply. micro-USB port for data transmission. DC Jack port for 24V power supply.
Antenna Gain	0dBi
Antenna Type	Dedicated 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.
Adapter	Apple	A1357 W010A051	REF. No.SEA0500
DC power	ZHAOXIN	RXN-305D	REF. No.SEA2700
Laptop	Lenovo	T430u	REF. No.SEA1800
Micro USB Cable	PHILIPS	SWR2101	REF. No.SEA0700



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### 4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 5.5 \times 10^{-8}$
2	Duty cycle	$\pm 0.57\%$
3	Occupied Bandwidth	$\pm 3\%$
4	RF Conducted power	$\pm 0.68\text{dB}$
5	RF Power Density	$\pm 1.50\text{dB}$
6	Conducted Spurious Emissions	$\pm 1.04\text{dB}$
7	RF Radiated Power	$\pm 4.5\text{dB}$ (below 1GHz)
		$\pm 4.8\text{dB}$ (above 1GHz)
8	Radiated Spurious Emission Test	$\pm 4.5\text{dB}$ (30MHz-1GHz)
		$\pm 4.8\text{dB}$ (1GHz-18GHz)
9	Temperature	$\pm 0.4^\circ\text{C}$
10	Humidity	$\pm 1.3\%$
11	Supply Voltages	$\pm 1.5\%$
12	Time	$\pm 3\%$

### 4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou Branch EMC Laboratory,  
198 Kezhu Road, Sciencetech Park, Guangzhou Economic & Technology Development District,  
Guangzhou, China 510663

Tel: +86 20 82155555 Fax: +86 20 82075059

No tests were sub-contracted.



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#### 4.5 Test Facility

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

● **NVLAP (Lab Code: 200611-0)**

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

● **ACMA**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian C-Tick mark as a result of our NVLAP accreditation.

● **SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO**

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

● **CNAS (Lab Code: L0167)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

● **FCC Recognized 2.948 Listed Test Firm(Registration No.: 282399)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 282399, May 31, 2002.

● **FCC Recognized Accredited Test Firm(Registration No.: 486818)**

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818, Jul 13, 2017.

● **Industry Canada (Registration No.: 4620B, CAB identifier: CN0052)**

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

● **VCCI (Registration No.: R-12460, C-12584, G-10449 and T-11179)**

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-10449 and T-11179 respectively.

● **CBTL (Lab Code: TL129)**

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2005, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.



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#### 4.6 Deviation from Standards

None

#### 4.7 Abnormalities from Standard Conditions

None



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## 5 Equipment List

Conducted Emissions at AC Power Line (150kHz-30MHz)					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Shielding Room	ChangZhou ZhongYu	8m x 3m x 3.8m	EMC0306	N/A	N/A
Two-Line V-Netwok	Rohde & Schwarz	ENV216	EMC0118	2020-01-10	2021-01-09
LISN	Rohde & Schwarz	ENV216	EMC2135	2019-09-16	2020-09-15
EMI Test Receiver	Rohde & Schwarz	ESCS30	EMC0506	2019-11-18	2020-11-17
Coaxial Cable	HangTianXing	2m	EMC0107	2018-09-20	2020-09-19
Voltage Probe	SGS-EMC	N/A	EMC0106	2019-05-10	2021-05-09
Conical Metal Housing	SGS-EMC	N/A	EMC0167	2018-04-19	2020-04-18
Test Software E3c	Audix	Ver. 5.4.1221b	GZE100-62	N/A	N/A

Minimum 6dB Bandwidth					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer	AgilentTechnologies	N9010A	EMC2138	2019-11-18	2020-11-17
6dB Attenuator	HP	8491A	EMC2062	2018-04-12	2020-04-12
Test Software JS1120-3	HangTianXing	V2.6	GZE100-69	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01
MI CABLE	SGS-EMC	0.8M	EMC2137	2019-11-02	2021-11-01

Conducted Peak Output Power					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer	AgilentTechnologies	N9010A	EMC2138	2019-11-18	2020-11-17
6dB Attenuator	HP	8491A	EMC2062	2018-04-12	2020-04-12
Test Software JS1120-3	HangTianXing	V2.6	GZE100-69	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01
MI CABLE	SGS-EMC	0.8M	EMC2137	2019-11-02	2021-11-01

Power Spectrum Density					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer	AgilentTechnologies	N9010A	EMC2138	2019-11-18	2020-11-17
6dB Attenuator	HP	8491A	EMC2062	2018-04-12	2020-04-12
Test Software JS1120-3	HangTianXing	V2.6	GZE100-69	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01
MI CABLE	SGS-EMC	0.8M	EMC2137	2019-11-02	2021-11-01



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Conducted Band Edges Measurement					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer	AgilentTechnologies	N9010A	EMC2138	2019-11-18	2020-11-17
6dB Attenuator	HP	8491A	EMC2062	2018-04-12	2020-04-12
Test Software JS1120-3	HangTianXing	V2.6	GZE100-69	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01
MI CABLE	SGS-EMC	0.8M	EMC2137	2019-11-02	2021-11-01

Conducted Spurious Emissions					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EXA Signal Analyzer	AgilentTechnologies	N9010A	EMC2138	2019-11-18	2020-11-17
6dB Attenuator	HP	8491A	EMC2062	2018-04-12	2020-04-12
Test Software JS1120-3	HangTianXing	V2.6	GZE100-69	N/A	N/A
MI CABLE	SGS-EMC	0.8M	EMC2136	2019-11-02	2021-11-01
MI CABLE	SGS-EMC	0.8M	EMC2137	2019-11-02	2021-11-01

Radiated Emissions which fall in the restricted bands					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver	Rohde & Schwarz	ESIB26	EMC0522	2020-01-10	2021-01-09
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC0056	2020-01-10	2021-01-09
Chamber cable	HangTianXing	N/A	EMC0542	2019-06-28	2021-06-27
Trilog Broadband Antenna 25MHz-1GHz	SCHWARZBECKME SS-ELEKTRONIK	VULB 9168	EMC2174	2018-09-06	2021-09-05
Bi-log Type Antenna	Schaffner Chase	CBL6143	EMC0519	2017-05-04	2020-05-03
Horn Antenna	SCHWARZBECKME SS-ELEKTRONIK	BBHA 9120D	EMC2016	2019-09-25	2022-09-24
Horn Antenna 1GHz-18GHz	Rohde & Schwarz	HF906	EMC0518	2018-09-02	2021-09-01
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2020-01-10	2021-01-09
Amplifier	HP	8447F	EMC2065	2019-05-29	2020-05-28
Pre-Amplifier MH648A	ANRITSU CORP	MH648A	EMC2086	2019-11-18	2020-11-17
Active Loop Antenna	EMCO	6502	EMC0523	2018-03-05	2021-03-04
High Pass Filter(915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2020-01-10	2021-01-09
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2020-01-10	2021-01-09
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2019-10-20	2022-10-19
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2017-12-19	2020-12-18
MXE EMI Receiver	Keysight	N9038A	EMC2139	2019-11-18	2020-11-17
EXA Signal Analyzer	Keysight	N9010A	EMC2138	2019-11-18	2020-11-17



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Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECKME SS-ELEKTRONIK	VULB 9168	SEM003-18	2019-02-22	2022-02-22
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A

Radiated Spurious Emissions					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
EMI Test Receiver	Rohde & Schwarz	ESIB26	EMC0522	2020-01-10	2021-01-09
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC0056	2020-01-10	2021-01-09
Chamber cable	HangTianXing	N/A	EMC0542	2019-06-28	2021-06-27
Trilog Broadband Antenna 25MHz-1GHz	SCHWARZBECKME SS-ELEKTRONIK	VULB 9168	EMC2174	2018-09-06	2021-09-05
Bi-log Type Antenna	Schaffner Chase	CBL6143	EMC0519	2017-05-04	2020-05-03
Horn Antenna	SCHWARZBECKME SS-ELEKTRONIK	BBHA 9120D	EMC2016	2019-09-25	2022-09-24
Horn Antenna 1GHz-18GHz	Rohde & Schwarz	HF906	EMC0518	2018-09-02	2021-09-01
1GHz-26.5 GHz Pre-Amplifier	Agilent	8449B	EMC0521	2020-01-10	2021-01-09
Amplifier	HP	8447F	EMC2065	2019-05-29	2020-05-28
Pre-Amplifier MH648A	ANRITSU CORP	MH648A	EMC2086	2019-11-18	2020-11-17
Active Loop Antenna	EMCO	6502	EMC0523	2018-03-05	2021-03-04
High Pass Filter(915MHz)	FSY MICROWAVE	HM1465-9SS	EMC2079	2020-01-10	2021-01-09
2.4GHz Filter	Micro-Tronics	BRM 50702	EMC2069	2020-01-10	2021-01-09
10m Semi-Anechoic Chamber	ETS	N/A	EMC0530	2019-10-20	2022-10-19
966 Anechoic Chamber	C.R.T	9m x 6m x 6m	EMC2142	2017-12-19	2020-12-18
MXE EMI Receiver	Keysight	N9038A	EMC2139	2019-11-18	2020-11-17
EXA Signal Analyzer	Keysight	N9010A	EMC2138	2019-11-18	2020-11-17
Trilog Broadband Antenna 30MHz-1GHz	SCHWARZBECKME SS-ELEKTRONIK	VULB 9168	SEM003-18	2019-02-22	2022-02-22
Test Software E3	Audix	Ver.6.120110a	GZE100-61	N/A	N/A

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DMM	Fluke	73	EMC0006	2019-07-16	2020-07-15
DMM	Fluke	73	EMC0007	2019-07-16	2020-07-15



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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(c)

#### 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 dedicated antenna and integrated on the main PCB and no consideration of replacement. The best-case gain of the antenna is 0dBi.



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## 7 Radio Spectrum Matter Test Results

### 7.1 Conducted Emissions at AC Power Line (150kHz-30MHz)

Test Requirement 47 CFR Part 15, Subpart C 15.207

Test Method: ANSI C63.10 (2013) Section 6.2

Limit:

Frequency of emission(MHz)	Conducted limit(dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

\*Decreases with the logarithm of the frequency.



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**7.1.1 E.U.T. Operation**

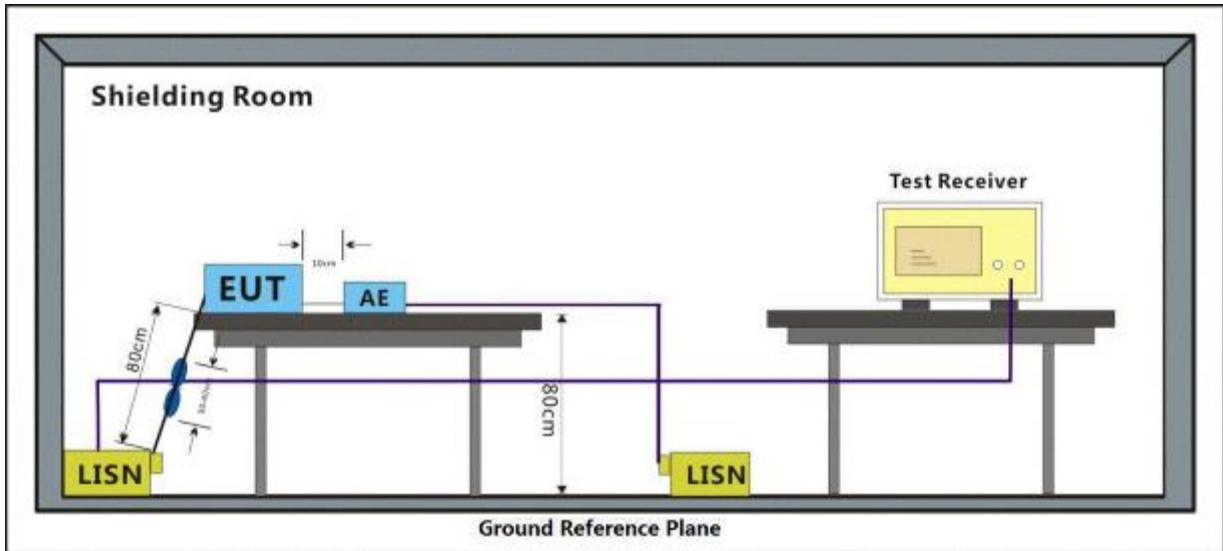
Operating Environment:

Temperature: 23 °C Humidity: 52 % RH Atmospheric Pressure: 1020 mbar

Test mode b2: TX mode\_Keep the EUT in WIFI continuously transmitting mode with all modulation types, power supply by DC5V (micro-USB port) and 24V (DC Jack Port) separately.

Only the data of worst-case power supply by USB port is recorded in the report.

**7.1.2 Test Setup Diagram**



**7.1.3 Measurement Procedure and Data**

- 1) The mains terminal disturbance voltage test was conducted in a shielded room.
- 2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50ohm/50μH + 5ohm linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.
- 3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,
- 4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.
- 5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10 on conducted measurement.

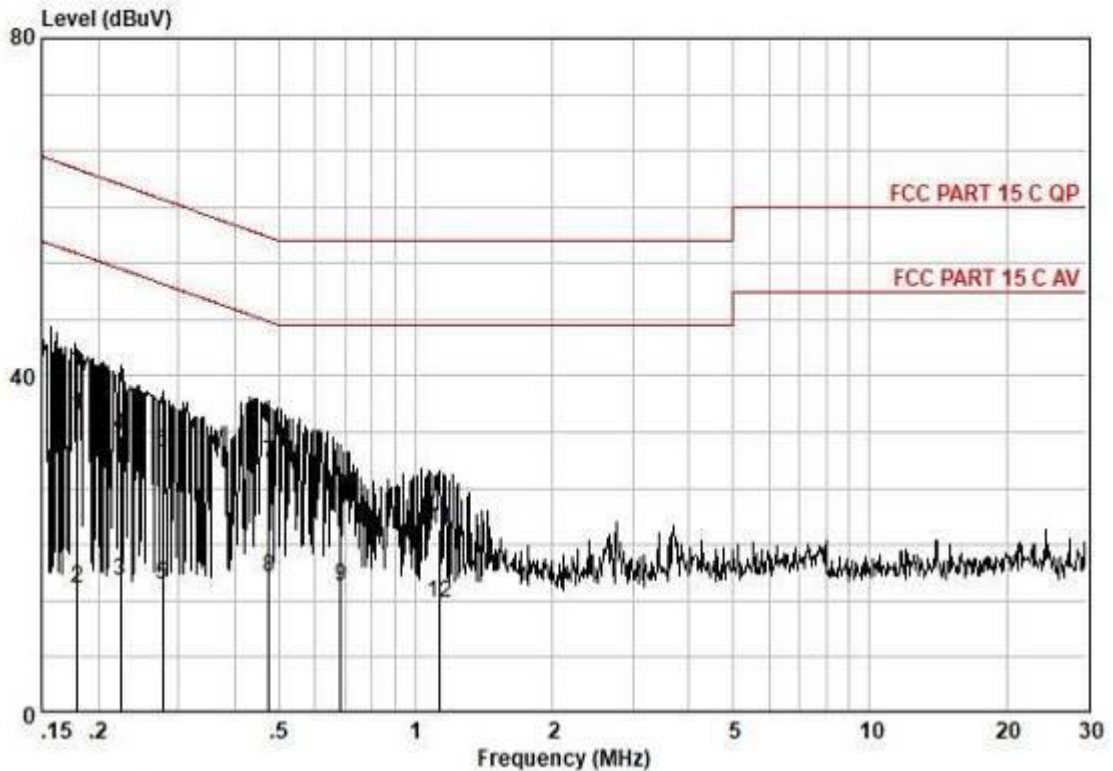
Remark: LISN=Read Level+ Cable Loss+ LISN Factor



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Mode:b2; Line: Live Line



Pol :LIVE  
No :  
Model :

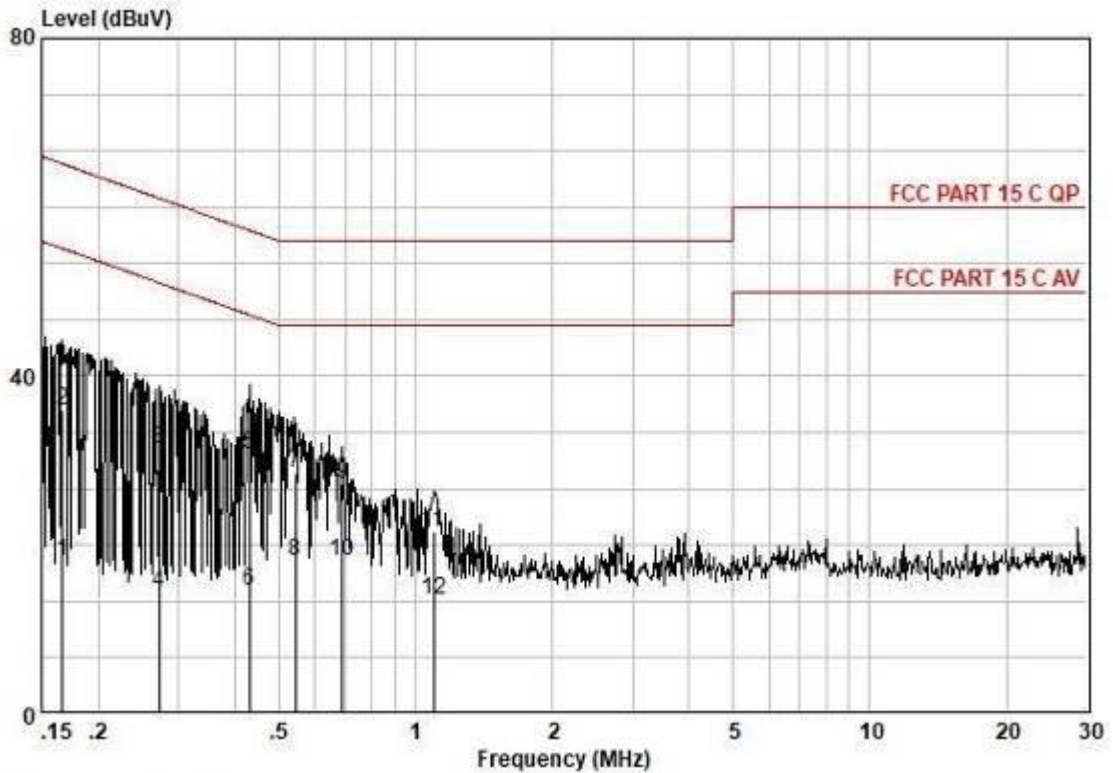
Frequency MHz	read level dBuV	Cable Loss dB	LISN Factor dB	Measured level dBuV	Limit Line dBuV	Over limit dB	Remark
0.10	25.61	0.10	9.66	35.37	64.50	-29.13	QP
0.10	5.01	0.10	9.66	14.77	54.50	-39.73	AVERAGE
0.22	5.95	0.10	9.67	15.72	52.70	-36.98	AVERAGE
0.22	23.25	0.10	9.67	33.02	62.70	-29.68	QP
0.28	5.45	0.10	9.67	15.22	50.90	-35.68	AVERAGE
0.28	21.17	0.10	9.67	30.94	60.90	-29.96	QP
0.47	19.93	0.10	9.67	29.70	56.45	-26.75	QP
0.47	6.27	0.10	9.67	16.04	46.45	-30.41	AVERAGE
0.60	5.18	0.10	9.67	14.95	46.00	-31.05	AVERAGE
0.60	15.49	0.10	9.67	25.26	56.00	-30.74	QP
1.13	12.01	0.10	9.68	21.79	56.00	-34.21	QP
1.13	3.31	0.10	9.68	13.09	46.00	-32.91	AVERAGE



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Mode:b2; Line: Neutral Line



Pol : NEUTRAL  
No :  
Model :

Frequency MHz	read level dBuV	Cable Loss dB	LISN Factor dB	Measured level dBuV	Limit Line dBuV	Over limit dB	Remark
0.17	8.37	0.10	9.60	18.07	55.12	-37.05	AVERAGE
0.17	26.37	0.10	9.60	36.07	65.12	-29.05	QP
0.27	21.71	0.10	9.59	31.40	61.07	-29.67	QP
0.27	4.62	0.10	9.59	14.31	51.07	-36.76	AVERAGE
0.43	21.11	0.10	9.59	30.80	57.24	-26.44	QP
0.43	4.96	0.10	9.59	14.65	47.24	-32.59	AVERAGE
0.54	18.86	0.10	9.60	28.56	56.00	-27.44	QP
0.54	8.29	0.10	9.60	17.99	46.00	-28.01	AVERAGE
0.69	17.61	0.10	9.60	27.31	56.00	-28.69	QP
0.69	8.50	0.10	9.60	18.20	46.00	-27.80	AVERAGE
1.09	11.96	0.10	9.61	21.66	56.00	-34.34	QP
1.09	3.75	0.10	9.61	13.46	46.00	-32.54	AVERAGE



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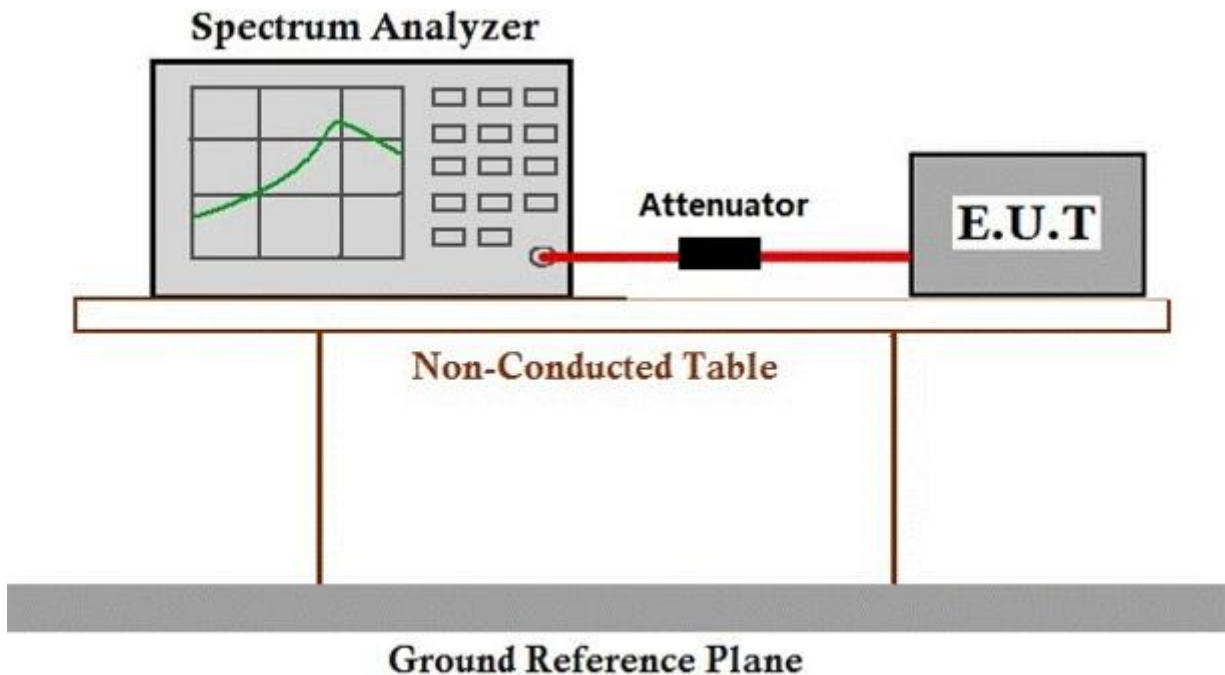
**7.2 Minimum 6dB Bandwidth**

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

**7.2.1 E.U.T. Operation**

Operating Environment:  
 Temperature: 24.7 °C Humidity: 51.1 % RH Atmospheric Pressure: 1020 mbar  
 Test mode b: 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 15.247



**7.3 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 $\geq 50$ hopping channels
	0.25 for $25 \leq$ hopping channels $< 50$
	1 for digital modulation
2400-2483.5	1 for $\geq 75$ 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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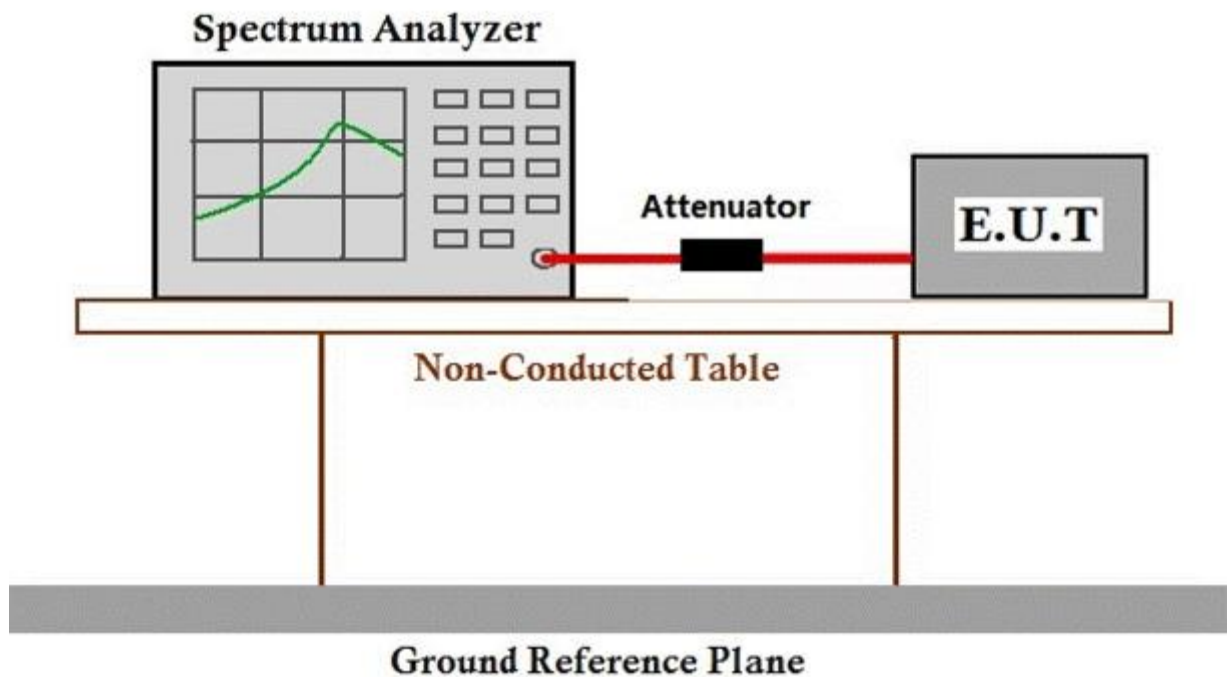
**7.3.1 E.U.T. Operation**

Operating Environment:

Temperature: 24.7 °C Humidity: 51.2 % RH Atmospheric Pressure: 1020 mbar

Test mode b: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 15.247



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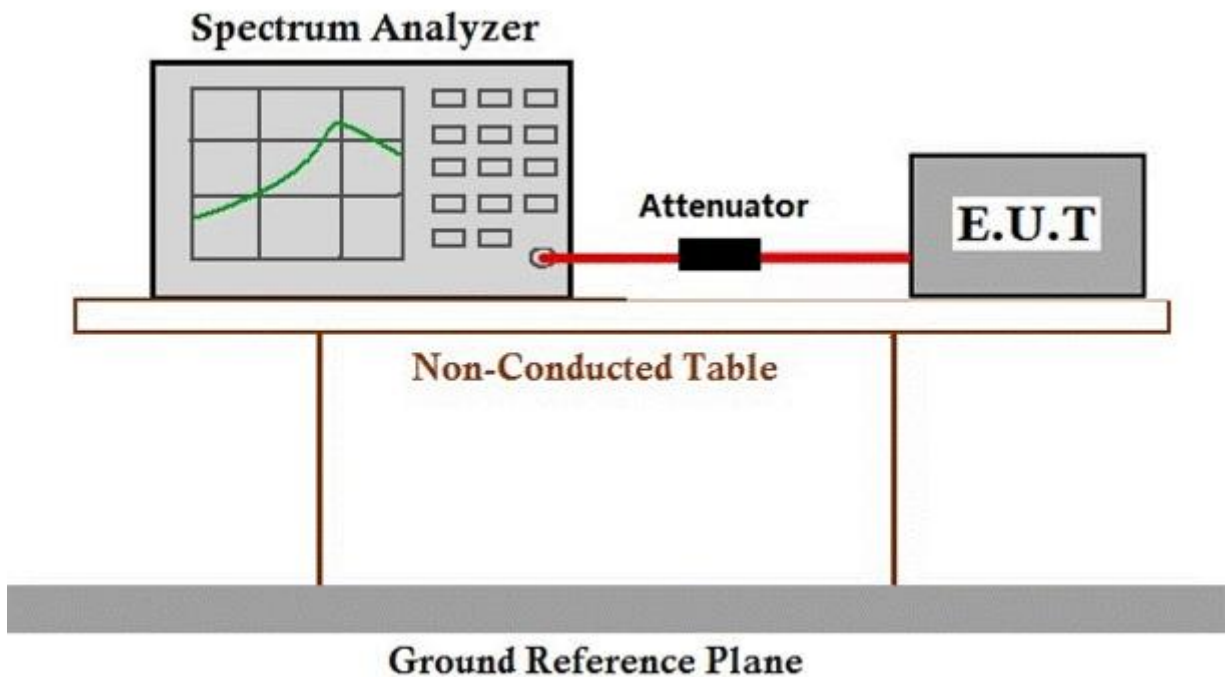
**7.4 Power Spectrum Density**

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

**7.4.1 E.U.T. Operation**

Operating Environment:  
 Temperature: 24.7 °C Humidity: 51.1 % RH Atmospheric Pressure: 1020 mbar  
 Test mode b: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 15.247



## 7.5 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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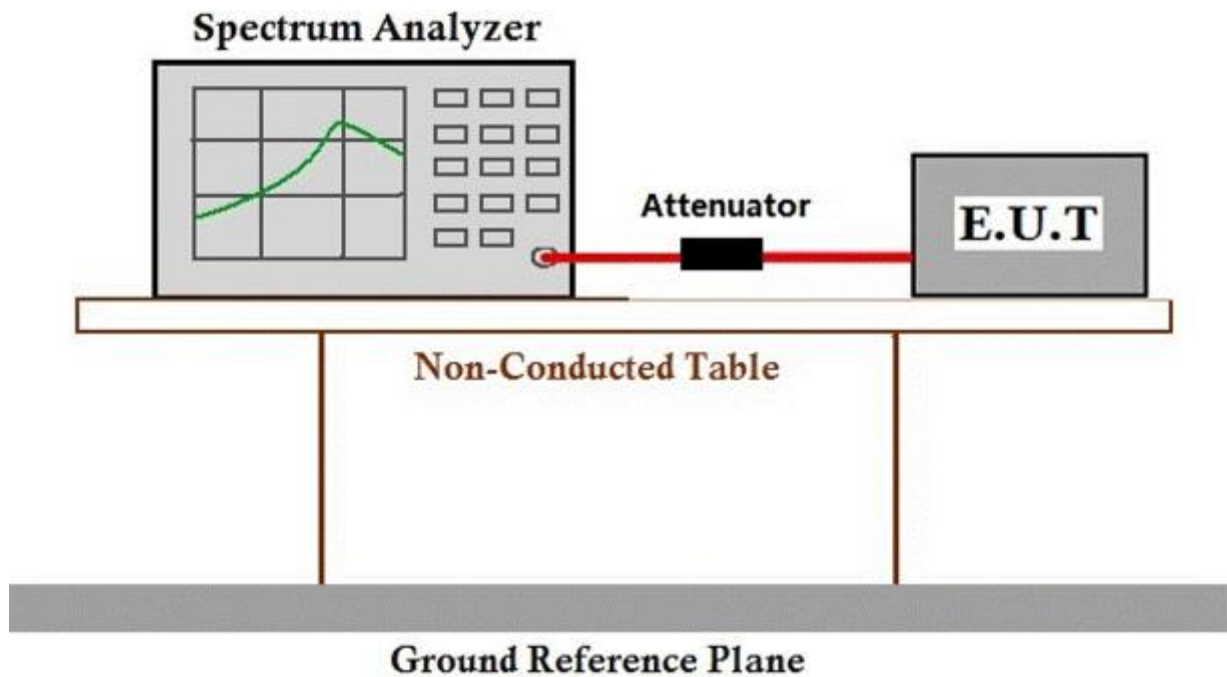
**7.5.1 E.U.T. Operation**

Operating Environment:

Temperature: 24.7 °C Humidity: 51.1 % RH Atmospheric Pressure: 1020 mbar

Test mode b: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 15.247



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## 7.6 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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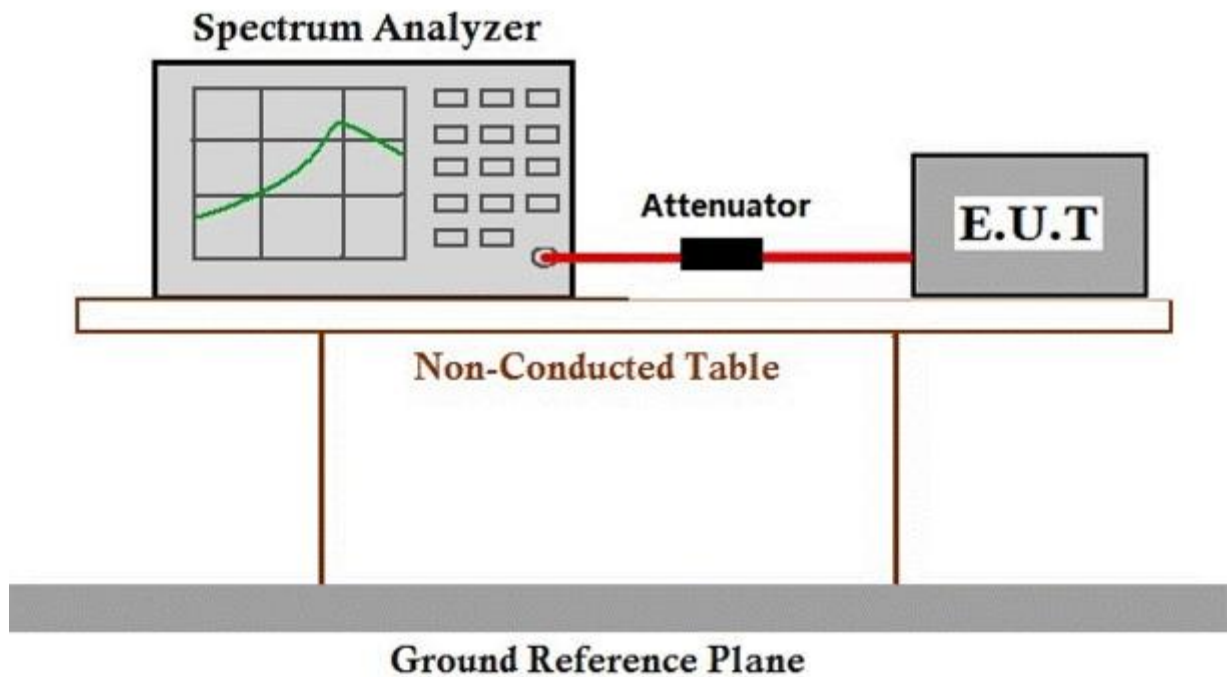
**7.6.1 E.U.T. Operation**

Operating Environment:

Temperature: 24.7 °C Humidity: 51.1 % RH Atmospheric Pressure: 1020 mbar

Test mode b: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**

The detailed test data see: Appendix 15.247



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**7.7 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

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.



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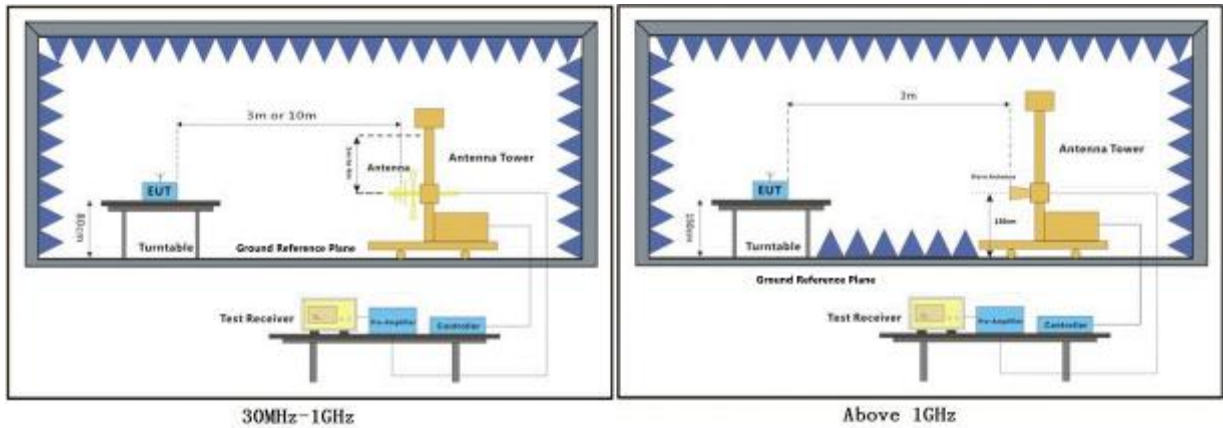
**7.7.1 E.U.T. Operation**

Operating Environment:

Temperature: 24.4 °C Humidity: 50.1 % RH Atmospheric Pressure: 1020 mbar

Test mode b: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**



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**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: 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.

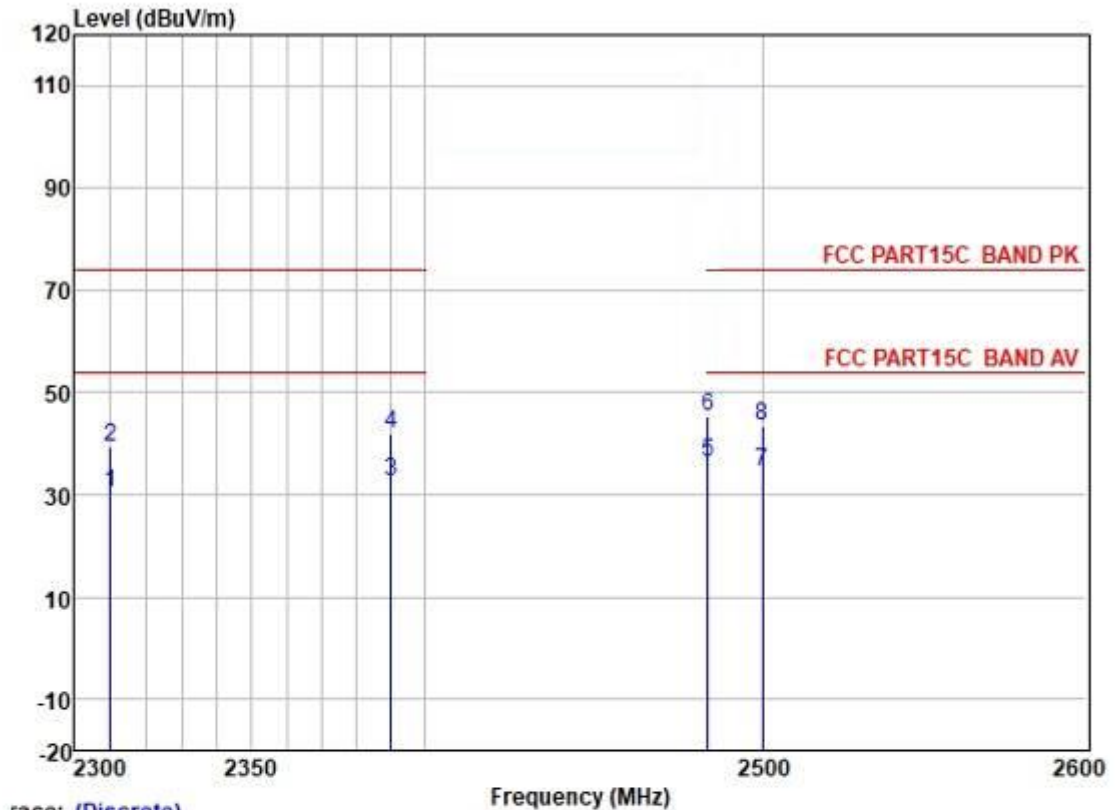
Level=Read Level + Antenna Factor + Cable Loss - Preamp Factor



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



Trace: (Discrete)

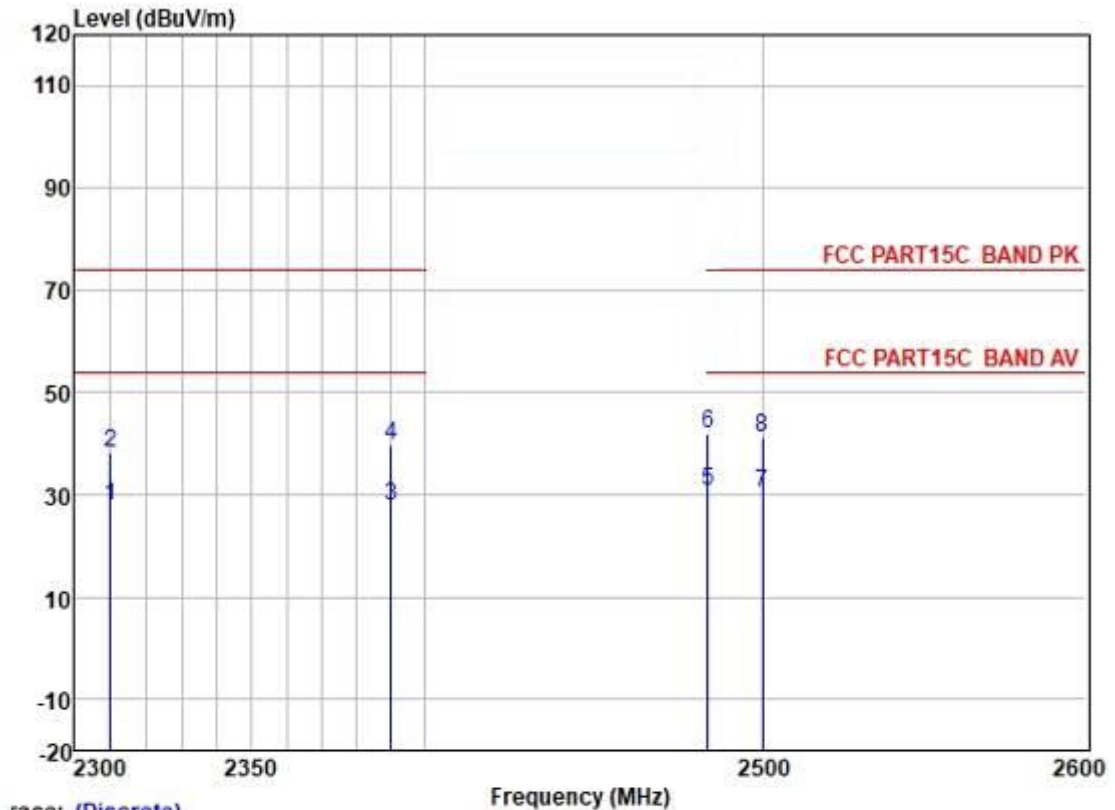
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	Freq	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2310.000	36.71	27.15	3.32	36.94	30.24	54.00	-23.76	HORIZONTAL Average
2	2310.000	45.82	27.15	3.32	36.94	39.35	74.00	-34.65	HORIZONTAL Peak
3	2390.000	38.72	27.33	3.48	36.92	32.61	54.00	-21.39	HORIZONTAL Average
4	2390.000	48.01	27.33	3.48	36.92	41.90	74.00	-32.10	HORIZONTAL Peak
5	2483.500	42.26	27.48	3.53	36.90	36.37	54.00	-17.63	HORIZONTAL Average
6	2483.500	51.36	27.48	3.53	36.90	45.47	74.00	-28.53	HORIZONTAL Peak
7	2500.000	40.65	27.50	3.40	36.89	34.66	54.00	-19.34	HORIZONTAL Average
8	2500.000	49.61	27.50	3.40	36.89	43.62	74.00	-30.38	HORIZONTAL Peak



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



Trace: (Discrete)

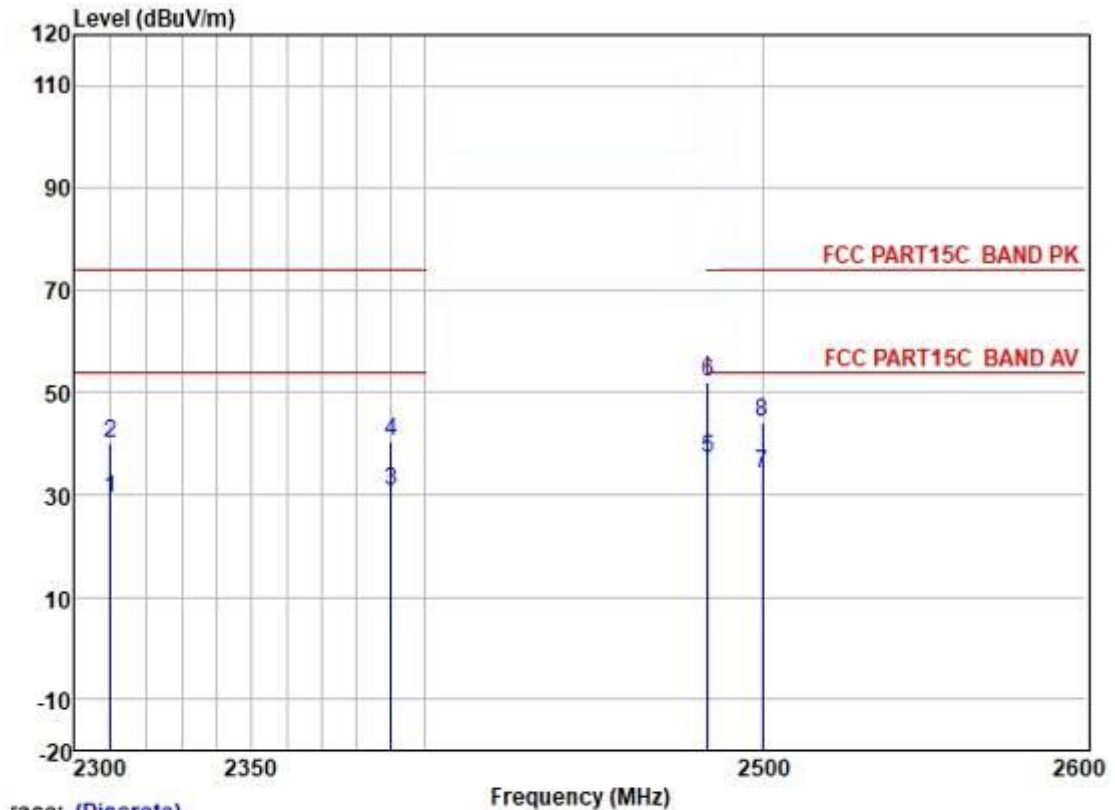
	Read	Antenna	Cable	Preamp	Level	Limit	Over		
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	34.25	27.15	3.32	36.94	27.78	54.00	-26.22	VERTICAL Average
2	2310.000	44.63	27.15	3.32	36.94	38.16	74.00	-35.84	VERTICAL Peak
3	2390.000	33.91	27.33	3.48	36.92	27.80	54.00	-26.20	VERTICAL Average
4	2390.000	45.97	27.33	3.48	36.92	39.86	74.00	-34.14	VERTICAL Peak
5	2483.500	36.69	27.48	3.53	36.90	30.80	54.00	-23.20	VERTICAL Average
6	2483.500	47.84	27.48	3.53	36.90	41.95	74.00	-32.05	VERTICAL Peak
7	2500.000	36.54	27.50	3.40	36.89	30.55	54.00	-23.45	VERTICAL Average
8	2500.000	47.31	27.50	3.40	36.89	41.32	74.00	-32.68	VERTICAL Peak



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



Trace: (Discrete)

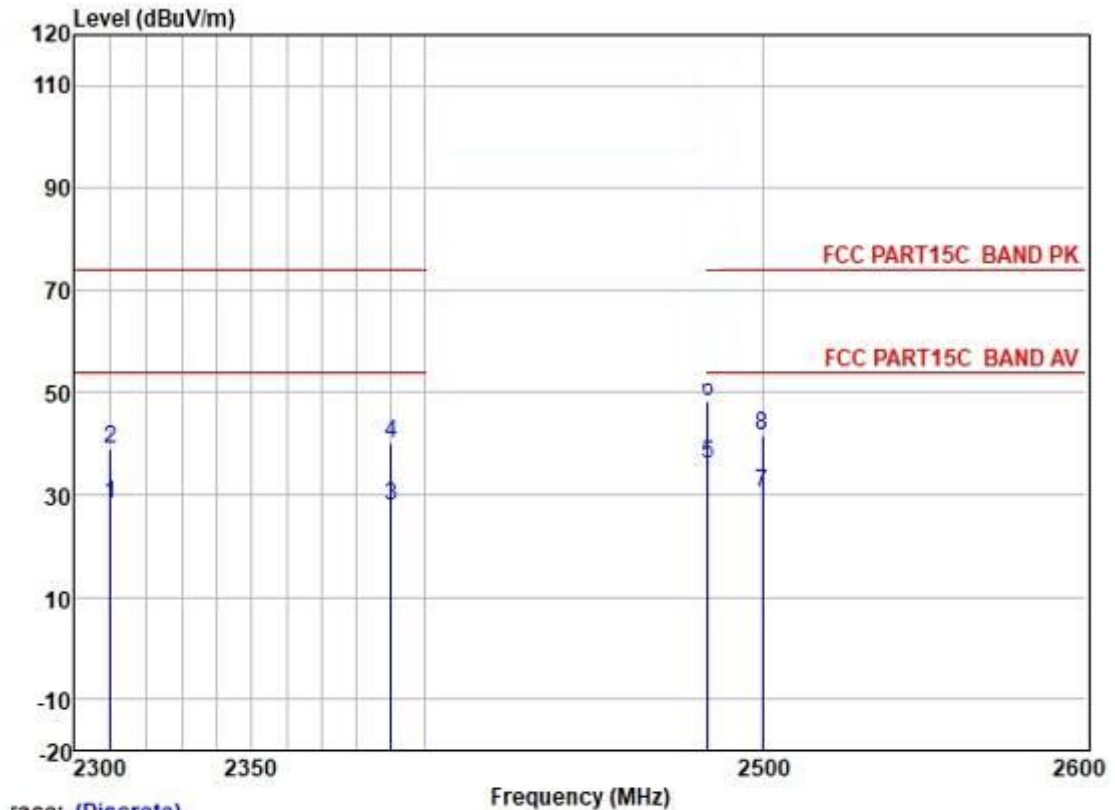
	Read	Antenna	Cable	Preamp	Level	Limit	Over		
	Freq	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2310.000	35.93	27.15	3.32	36.94	29.46	54.00	-24.54	HORIZONTAL Average
2	2310.000	46.55	27.15	3.32	36.94	40.08	74.00	-33.92	HORIZONTAL Peak
3	2390.000	37.01	27.33	3.48	36.92	30.90	54.00	-23.10	HORIZONTAL Average
4	2390.000	46.57	27.33	3.48	36.92	40.46	74.00	-33.54	HORIZONTAL Peak
5	2483.500	42.83	27.48	3.53	36.90	36.94	54.00	-17.06	HORIZONTAL Average
6	2483.500	57.78	27.48	3.53	36.90	51.89	74.00	-22.11	HORIZONTAL Peak
7	2500.000	40.23	27.50	3.40	36.89	34.24	54.00	-19.76	HORIZONTAL Average
8	2500.000	50.02	27.50	3.40	36.89	44.03	74.00	-29.97	HORIZONTAL Peak



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



Trace: (Discrete)

	Read	Antenna	Cable	Preamp	Level	Limit	Over		
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	34.62	27.15	3.32	36.94	28.15	54.00	-25.85	VERTICAL Average
2	2310.000	45.57	27.15	3.32	36.94	39.10	74.00	-34.90	VERTICAL Peak
3	2390.000	33.87	27.33	3.48	36.92	27.76	54.00	-26.24	VERTICAL Average
4	2390.000	46.35	27.33	3.48	36.92	40.24	74.00	-33.76	VERTICAL Peak
5	2483.500	41.76	27.48	3.53	36.90	35.87	54.00	-18.13	VERTICAL Average
6	2483.500	54.18	27.48	3.53	36.90	48.29	74.00	-25.71	VERTICAL Peak
7	2500.000	36.29	27.50	3.40	36.89	30.30	54.00	-23.70	VERTICAL Average
8	2500.000	47.60	27.50	3.40	36.89	41.61	74.00	-32.39	VERTICAL Peak

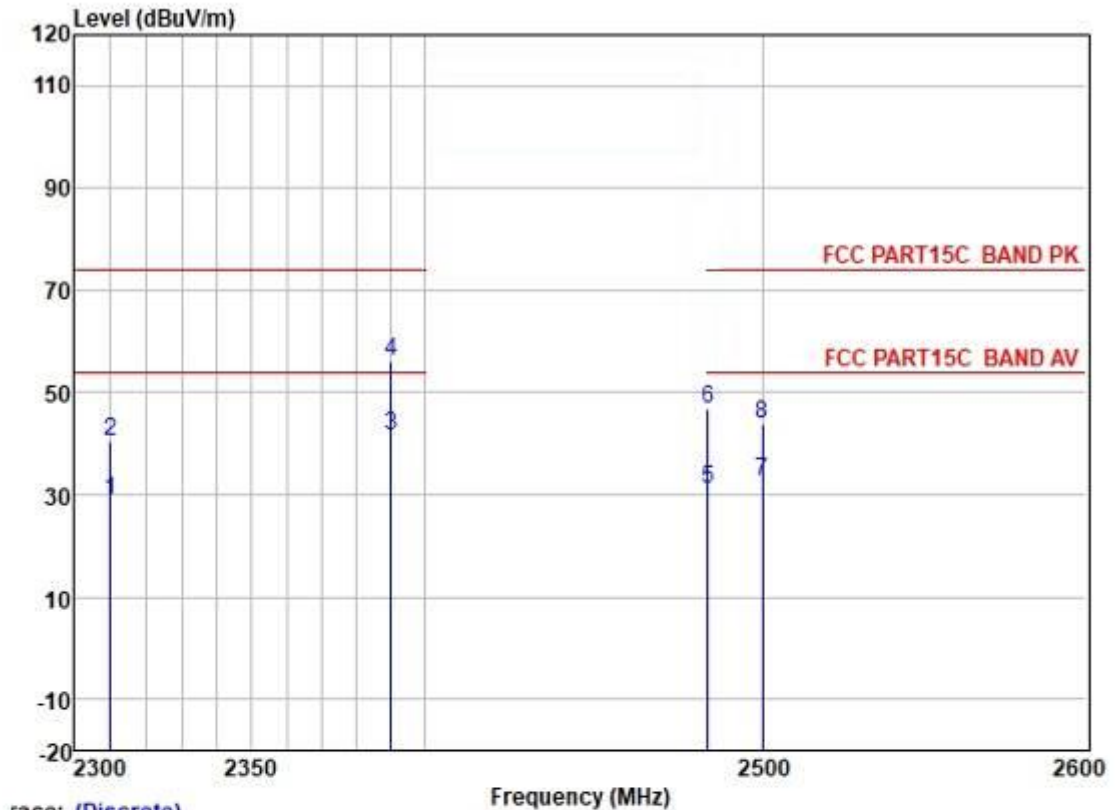


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Mode:b; Polarization:Horizontal; Modulation:g; bandwidth:20MHz; Channel:Low



Trace: (Discrete)

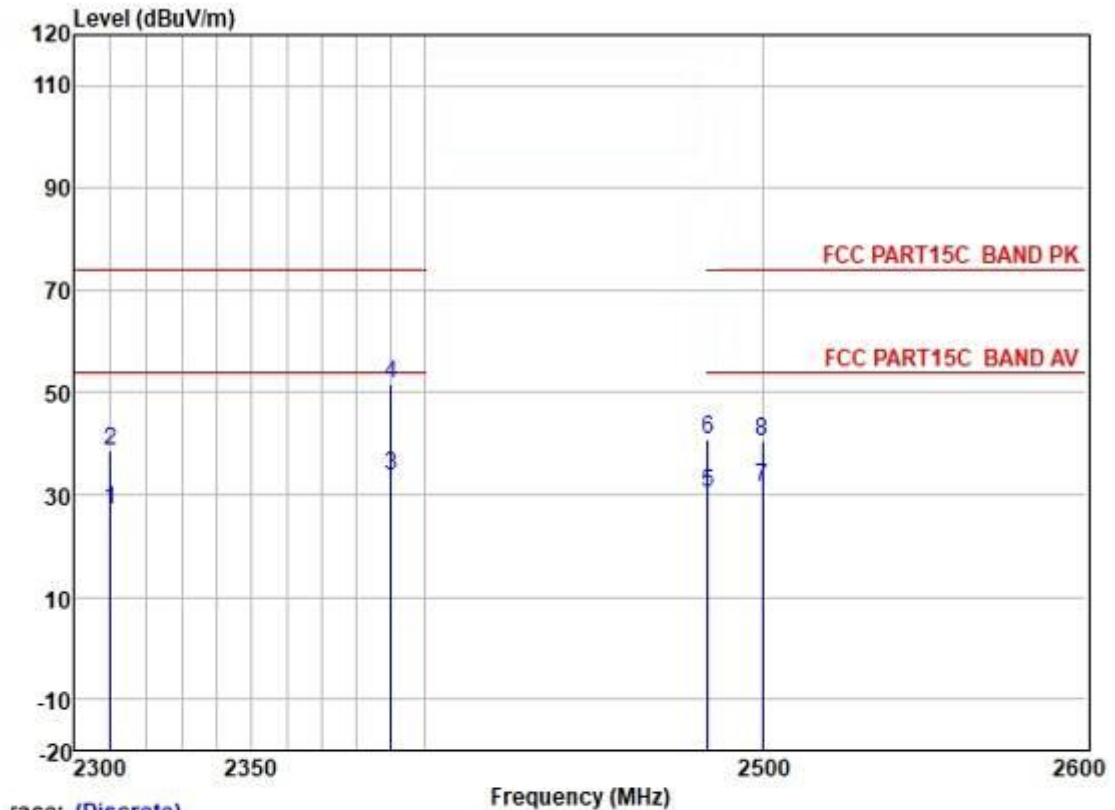
	Read	Antenna	Cable	Preamp	Level	Limit	Over		
	Freq	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	2310.000	35.32	27.15	3.32	36.94	28.85	54.00	-25.15	HORIZONTAL Average
2	2310.000	46.82	27.15	3.32	36.94	40.35	74.00	-33.65	HORIZONTAL Peak
3	2390.000	47.59	27.33	3.48	36.92	41.48	54.00	-12.52	HORIZONTAL Average
4	2390.000	62.22	27.33	3.48	36.92	56.11	74.00	-17.89	HORIZONTAL Peak
5	2483.500	37.12	27.48	3.53	36.90	31.23	54.00	-22.77	HORIZONTAL Average
6	2483.500	52.61	27.48	3.53	36.90	46.72	74.00	-27.28	HORIZONTAL Peak
7	2500.000	38.76	27.50	3.40	36.89	32.77	54.00	-21.23	HORIZONTAL Average
8	2500.000	49.88	27.50	3.40	36.89	43.89	74.00	-30.11	HORIZONTAL Peak



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



Trace: (Discrete)

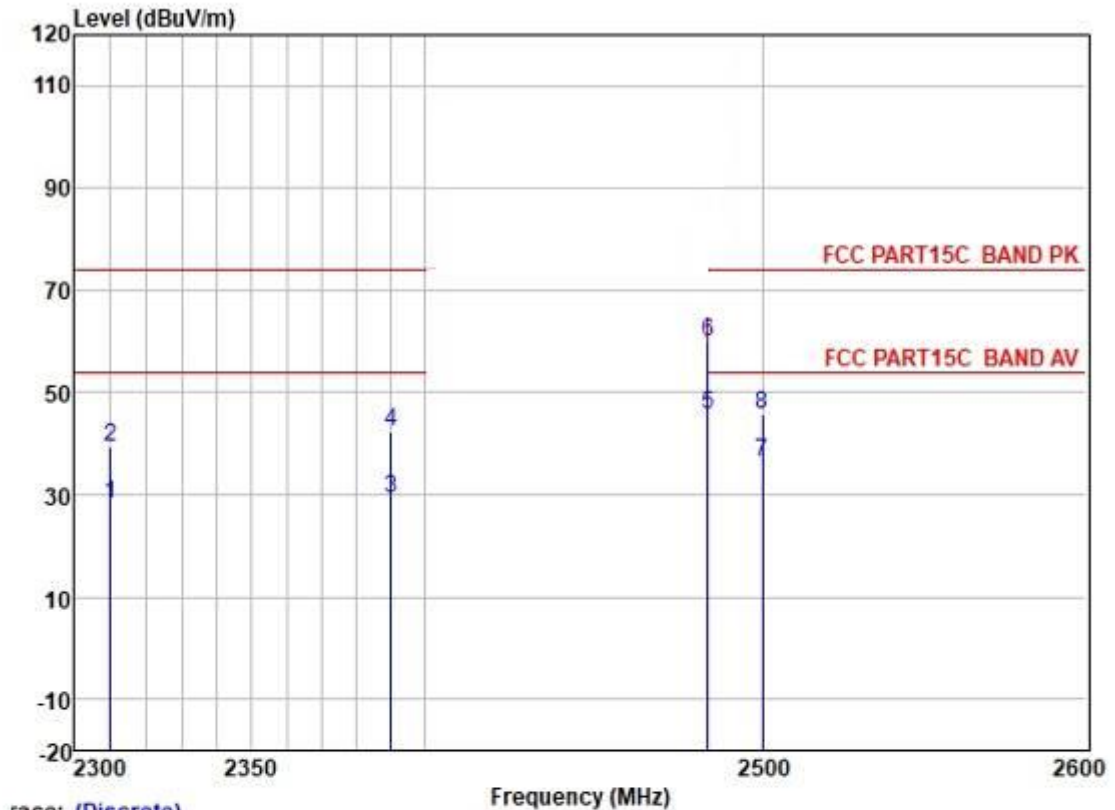
	ReadAntenna	Cable	Preamp	Limit	Over				
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	33.46	27.15	3.32	36.94	26.99	54.00	-27.01	VERTICAL Average
2	2310.000	44.97	27.15	3.32	36.94	38.50	74.00	-35.50	VERTICAL Peak
3	2390.000	40.05	27.33	3.48	36.92	33.94	54.00	-20.06	VERTICAL Average
4	2390.000	57.69	27.33	3.48	36.92	51.58	74.00	-22.42	VERTICAL Peak
5	2483.500	36.29	27.48	3.53	36.90	30.40	54.00	-23.60	VERTICAL Average
6	2483.500	46.86	27.48	3.53	36.90	40.97	74.00	-33.03	VERTICAL Peak
7	2500.000	37.50	27.50	3.40	36.89	31.51	54.00	-22.49	VERTICAL Average
8	2500.000	46.42	27.50	3.40	36.89	40.43	74.00	-33.57	VERTICAL Peak



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



Trace: (Discrete)

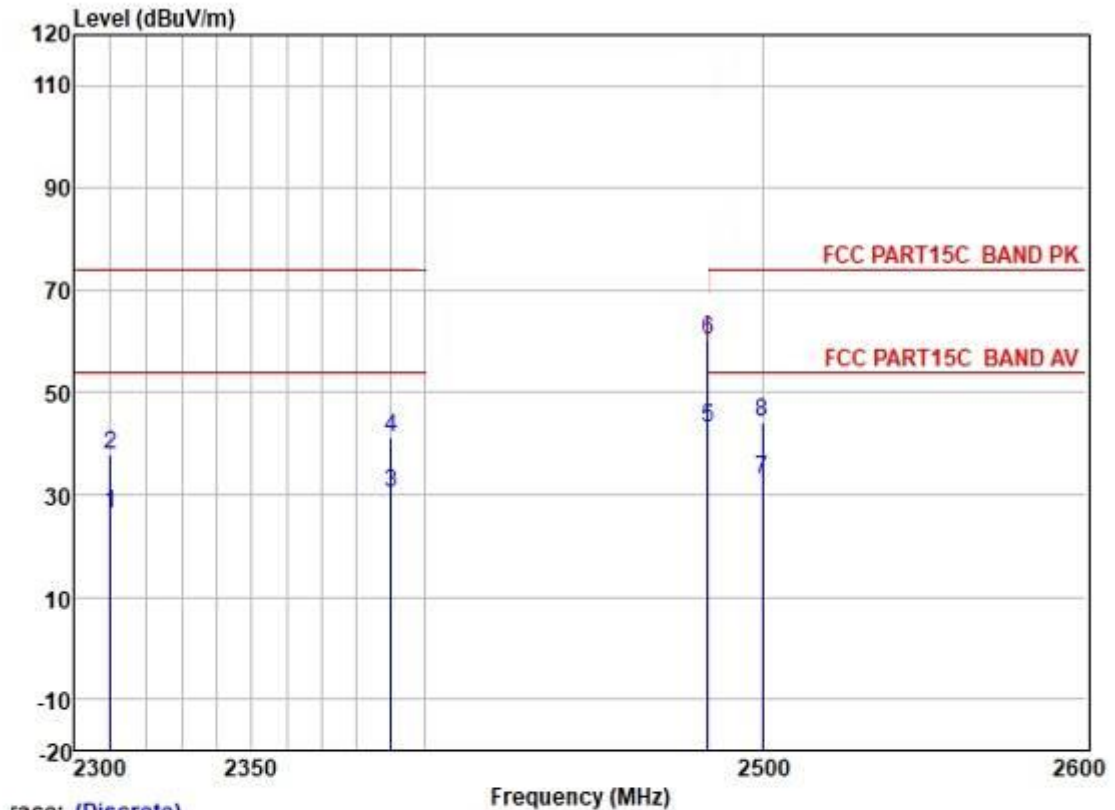
	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	34.55	27.15	3.32	36.94	28.08	54.00	-25.92	HORIZONTAL	Average
2	2310.000	45.75	27.15	3.32	36.94	39.28	74.00	-34.72	HORIZONTAL	Peak
3	2390.000	35.37	27.33	3.48	36.92	29.26	54.00	-24.74	HORIZONTAL	Average
4	2390.000	48.48	27.33	3.48	36.92	42.37	74.00	-31.63	HORIZONTAL	Peak
5	2483.500	51.66	27.48	3.53	36.90	45.77	54.00	-8.23	HORIZONTAL	Average
6	2483.500	65.93	27.48	3.53	36.90	60.04	74.00	-13.96	HORIZONTAL	Peak
7	2500.000	42.20	27.50	3.40	36.89	36.21	54.00	-17.79	HORIZONTAL	Average
8	2500.000	51.62	27.50	3.40	36.89	45.63	74.00	-28.37	HORIZONTAL	Peak



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



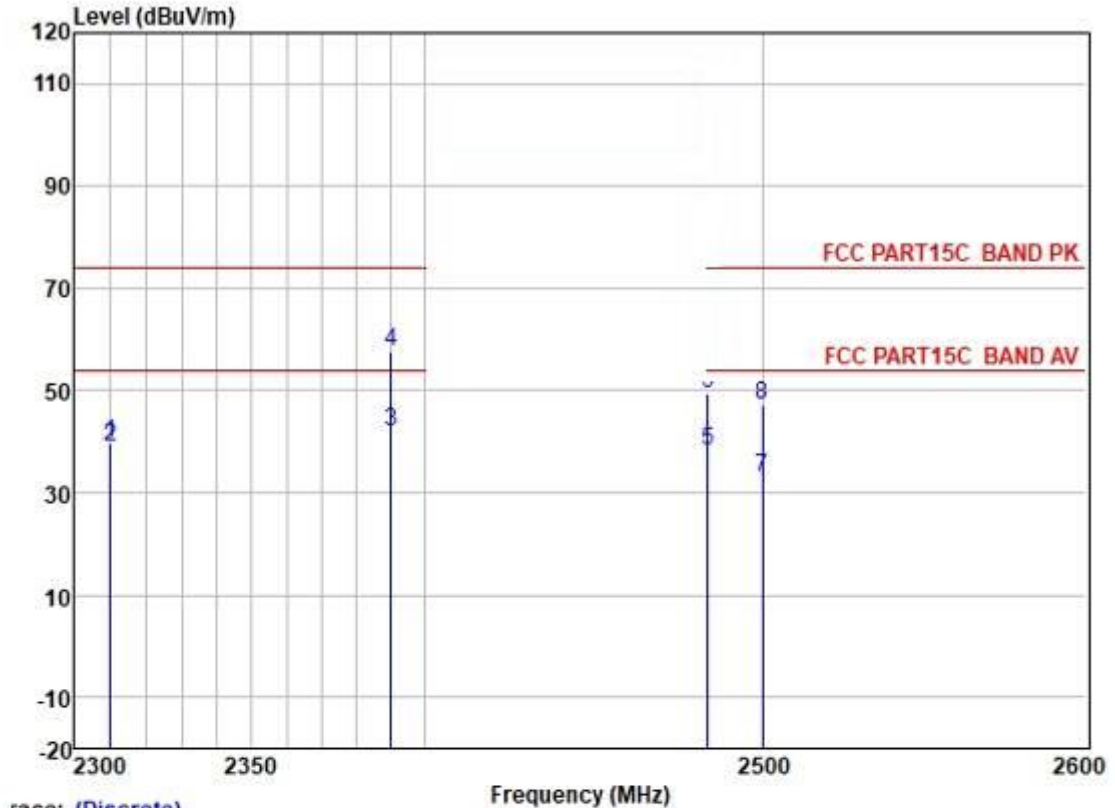
Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	32.67	27.15	3.32	36.94	26.20	54.00	-27.80	VERTICAL	Average
2	2310.000	44.37	27.15	3.32	36.94	37.90	74.00	-36.10	VERTICAL	Peak
3	2390.000	36.58	27.33	3.48	36.92	30.47	54.00	-23.53	VERTICAL	Average
4	2390.000	47.31	27.33	3.48	36.92	41.20	74.00	-32.80	VERTICAL	Peak
5	2483.500	49.15	27.48	3.53	36.90	43.26	54.00	-10.74	VERTICAL	Average
6	2483.500	66.06	27.48	3.53	36.90	60.17	74.00	-13.83	VERTICAL	Peak
7	2500.000	38.84	27.50	3.40	36.89	32.85	54.00	-21.15	VERTICAL	Average
8	2500.000	50.15	27.50	3.40	36.89	44.16	74.00	-29.84	VERTICAL	Peak



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



Trace: (Discrete)

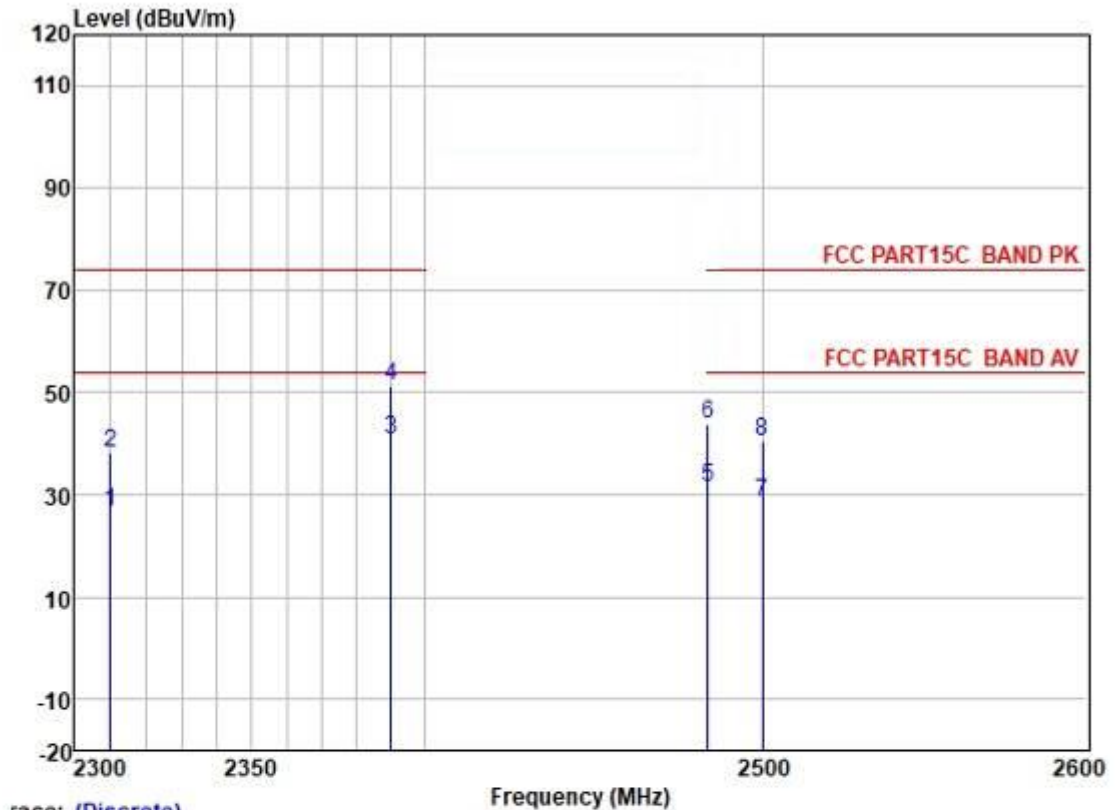
	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	46.19	27.15	3.32	36.94	39.72	54.00	-14.28	HORIZONTAL	Average
2	2310.000	45.33	27.15	3.32	36.94	38.86	74.00	-35.14	HORIZONTAL	Peak
3	2390.000	47.91	27.33	3.48	36.92	41.80	54.00	-12.20	HORIZONTAL	Average
4	2390.000	63.88	27.33	3.48	36.92	57.77	74.00	-16.23	HORIZONTAL	Peak
5	2483.500	43.95	27.48	3.53	36.90	38.06	54.00	-15.94	HORIZONTAL	Average
6	2483.500	55.38	27.48	3.53	36.90	49.49	74.00	-24.51	HORIZONTAL	Peak
7	2500.000	38.96	27.50	3.40	36.89	32.97	54.00	-21.03	HORIZONTAL	Average
8	2500.000	53.04	27.50	3.40	36.89	47.05	74.00	-26.95	HORIZONTAL	Peak



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



Trace: (Discrete)

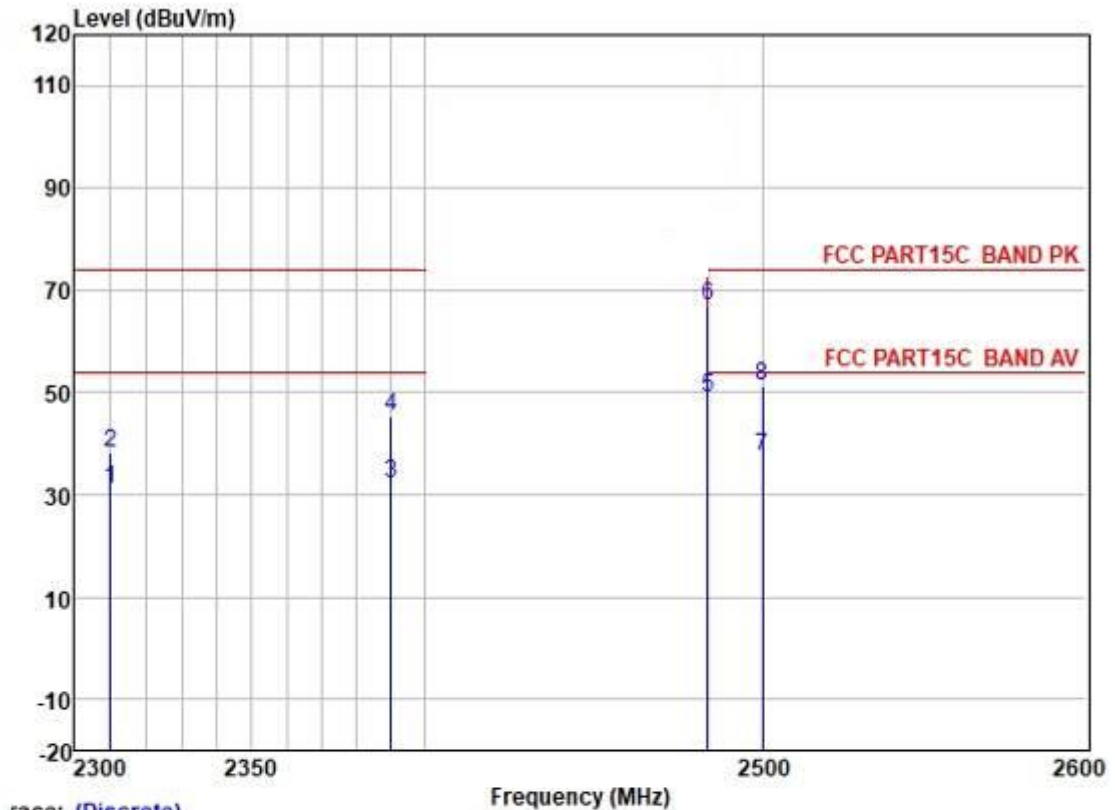
	ReadAntenna	Cable	Preamp	Limit	Over				
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	33.18	27.15	3.32	36.94	26.71	54.00	-27.29	VERTICAL Average
2	2310.000	44.73	27.15	3.32	36.94	38.26	74.00	-35.74	VERTICAL Peak
3	2390.000	46.91	27.33	3.48	36.92	40.80	54.00	-13.20	VERTICAL Average
4	2390.000	57.49	27.33	3.48	36.92	51.38	74.00	-22.62	VERTICAL Peak
5	2483.500	37.29	27.48	3.53	36.90	31.40	54.00	-22.60	VERTICAL Average
6	2483.500	49.59	27.48	3.53	36.90	43.70	74.00	-30.30	VERTICAL Peak
7	2500.000	34.46	27.50	3.40	36.89	28.47	54.00	-25.53	VERTICAL Average
8	2500.000	46.36	27.50	3.40	36.89	40.37	74.00	-33.63	VERTICAL Peak



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



Trace: (Discrete)

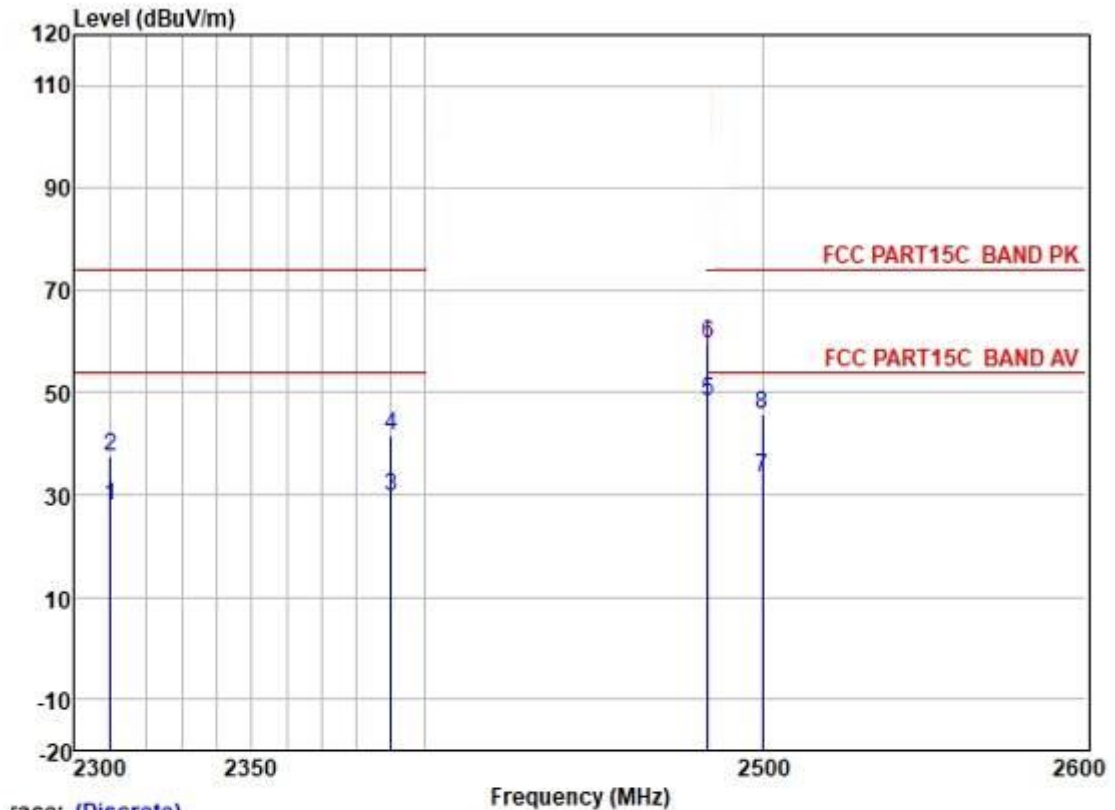
	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	37.59	27.15	3.32	36.94	31.12	54.00	-22.88	HORIZONTAL	Average
2	2310.000	44.81	27.15	3.32	36.94	38.34	74.00	-35.66	HORIZONTAL	Peak
3	2390.000	38.46	27.33	3.48	36.92	32.35	54.00	-21.65	HORIZONTAL	Average
4	2390.000	51.27	27.33	3.48	36.92	45.16	74.00	-28.84	HORIZONTAL	Peak
5	2483.500	55.03	27.48	3.53	36.90	49.14	54.00	-4.86	HORIZONTAL	Average
6	2483.500	72.85	27.48	3.53	36.90	66.96	74.00	-7.04	HORIZONTAL	Peak
7	2500.000	43.35	27.50	3.40	36.89	37.36	54.00	-16.64	HORIZONTAL	Average
8	2500.000	57.45	27.50	3.40	36.89	51.46	74.00	-22.54	HORIZONTAL	Peak



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



Trace: (Discrete)

	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	34.12	27.15	3.32	36.94	27.65	54.00	-26.35	VERTICAL	Average
2	2310.000	44.01	27.15	3.32	36.94	37.54	74.00	-36.46	VERTICAL	Peak
3	2390.000	35.64	27.33	3.48	36.92	29.53	54.00	-24.47	VERTICAL	Average
4	2390.000	47.67	27.33	3.48	36.92	41.56	74.00	-32.44	VERTICAL	Peak
5	2483.500	54.21	27.48	3.53	36.90	48.32	54.00	-5.68	VERTICAL	Average
6	2483.500	65.57	27.48	3.53	36.90	59.68	74.00	-14.32	VERTICAL	Peak
7	2500.000	39.33	27.50	3.40	36.89	33.34	54.00	-20.66	VERTICAL	Average
8	2500.000	51.58	27.50	3.40	36.89	45.59	74.00	-28.41	VERTICAL	Peak

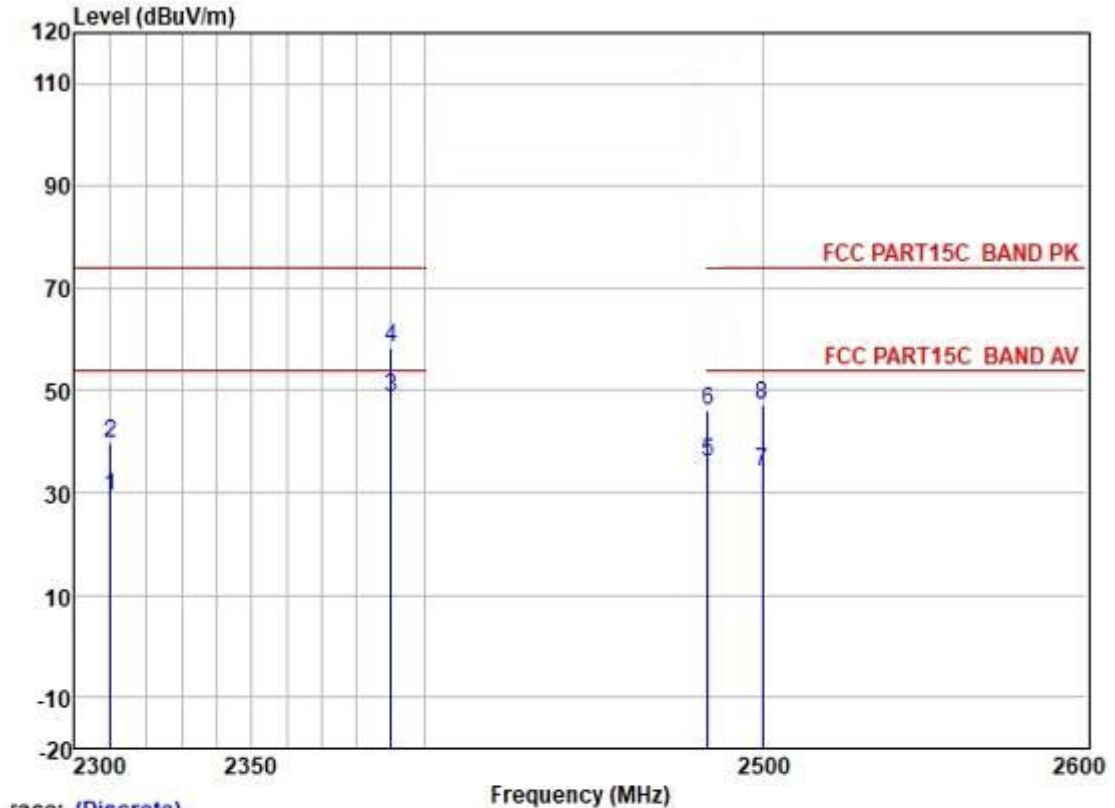


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Mode:b; Polarization:Horizontal; Modulation:n; bandwidth:40MHz; Channel:Low



Trace: (Discrete)

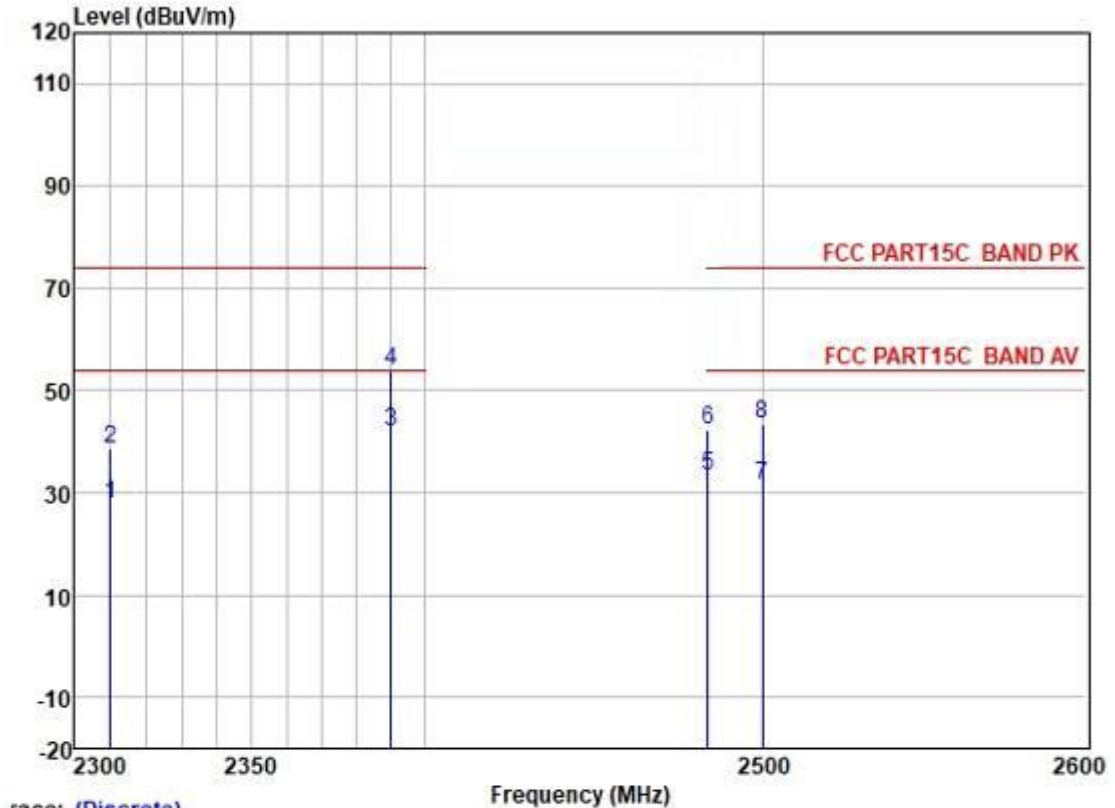
	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	35.64	27.15	3.32	36.94	29.17	54.00	-24.83	HORIZONTAL	Average
2	2310.000	46.07	27.15	3.32	36.94	39.60	74.00	-34.40	HORIZONTAL	Peak
3	2390.000	54.64	27.33	3.48	36.92	48.53	54.00	-5.47	HORIZONTAL	Average
4	2390.000	64.57	27.33	3.48	36.92	58.46	74.00	-15.54	HORIZONTAL	Peak
5	2483.500	41.78	27.48	3.53	36.90	35.89	54.00	-18.11	HORIZONTAL	Average
6	2483.500	51.92	27.48	3.53	36.90	46.03	74.00	-27.97	HORIZONTAL	Peak
7	2500.000	40.29	27.50	3.40	36.89	34.30	54.00	-19.70	HORIZONTAL	Average
8	2500.000	53.22	27.50	3.40	36.89	47.23	74.00	-26.77	HORIZONTAL	Peak



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



Trace: (Discrete)

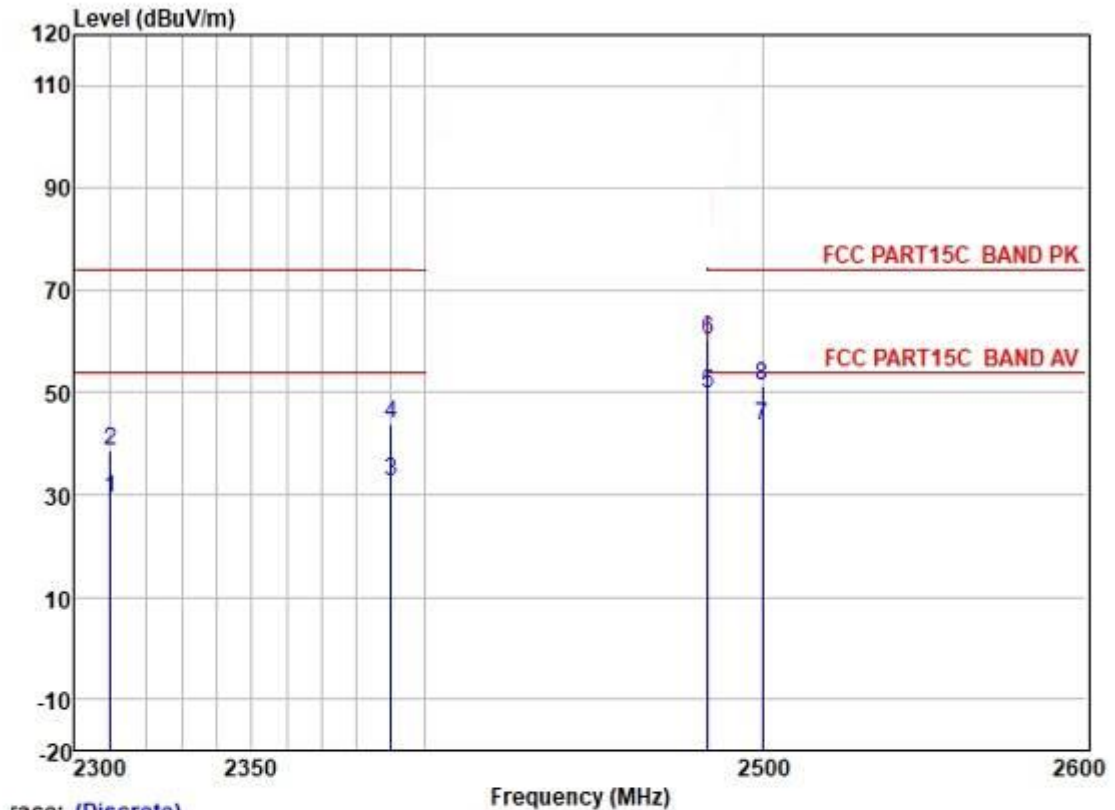
	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	34.09	27.15	3.32	36.94	27.62	54.00	-26.38	VERTICAL	Average
2	2310.000	45.00	27.15	3.32	36.94	38.53	74.00	-35.47	VERTICAL	Peak
3	2390.000	48.00	27.33	3.48	36.92	41.89	54.00	-12.11	VERTICAL	Average
4	2390.000	59.93	27.33	3.48	36.92	53.82	74.00	-20.18	VERTICAL	Peak
5	2483.500	39.26	27.48	3.53	36.90	33.37	54.00	-20.63	VERTICAL	Average
6	2483.500	48.12	27.48	3.53	36.90	42.23	74.00	-31.77	VERTICAL	Peak
7	2500.000	37.46	27.50	3.40	36.89	31.47	54.00	-22.53	VERTICAL	Average
8	2500.000	49.62	27.50	3.40	36.89	43.63	74.00	-30.37	VERTICAL	Peak



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



Trace: (Discrete)

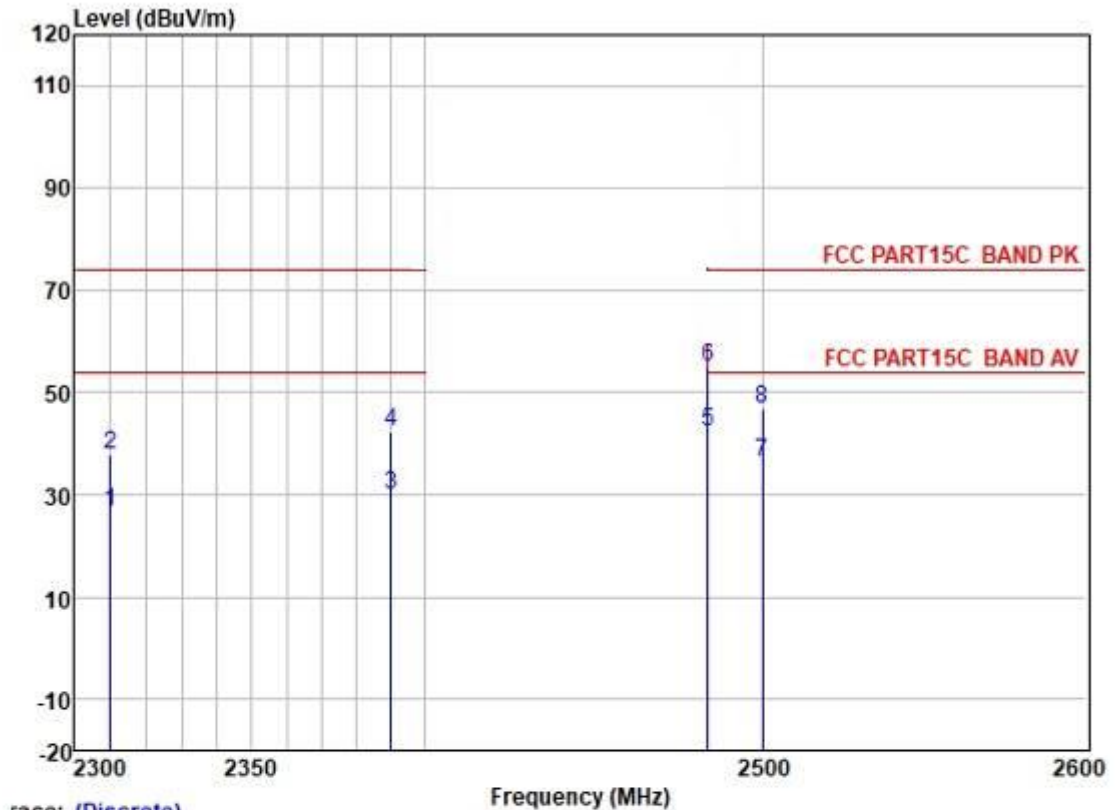
	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	35.88	27.15	3.32	36.94	29.41	54.00	-24.59	HORIZONTAL	Average
2	2310.000	45.15	27.15	3.32	36.94	38.68	74.00	-35.32	HORIZONTAL	Peak
3	2390.000	38.63	27.33	3.48	36.92	32.52	54.00	-21.48	HORIZONTAL	Average
4	2390.000	50.07	27.33	3.48	36.92	43.96	74.00	-30.04	HORIZONTAL	Peak
5	2483.500	55.65	27.48	3.53	36.90	49.76	54.00	-4.24	HORIZONTAL	Average
6	2483.500	66.26	27.48	3.53	36.90	60.37	74.00	-13.63	HORIZONTAL	Peak
7	2500.000	49.29	27.50	3.40	36.89	43.30	54.00	-10.70	HORIZONTAL	Average
8	2500.000	57.37	27.50	3.40	36.89	51.38	74.00	-22.62	HORIZONTAL	Peak



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



Trace: (Discrete)

	Freq	ReadAntenna Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	2310.000	33.10	27.15	3.32	36.94	26.63	54.00	-27.37	VERTICAL	Average
2	2310.000	44.29	27.15	3.32	36.94	37.82	74.00	-36.18	VERTICAL	Peak
3	2390.000	36.31	27.33	3.48	36.92	30.20	54.00	-23.80	VERTICAL	Average
4	2390.000	48.50	27.33	3.48	36.92	42.39	74.00	-31.61	VERTICAL	Peak
5	2483.500	48.10	27.48	3.53	36.90	42.21	54.00	-11.79	VERTICAL	Average
6	2483.500	61.00	27.48	3.53	36.90	55.11	74.00	-18.89	VERTICAL	Peak
7	2500.000	42.53	27.50	3.40	36.89	36.54	54.00	-17.46	VERTICAL	Average
8	2500.000	52.85	27.50	3.40	36.89	46.86	74.00	-27.14	VERTICAL	Peak



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**7.8 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

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.



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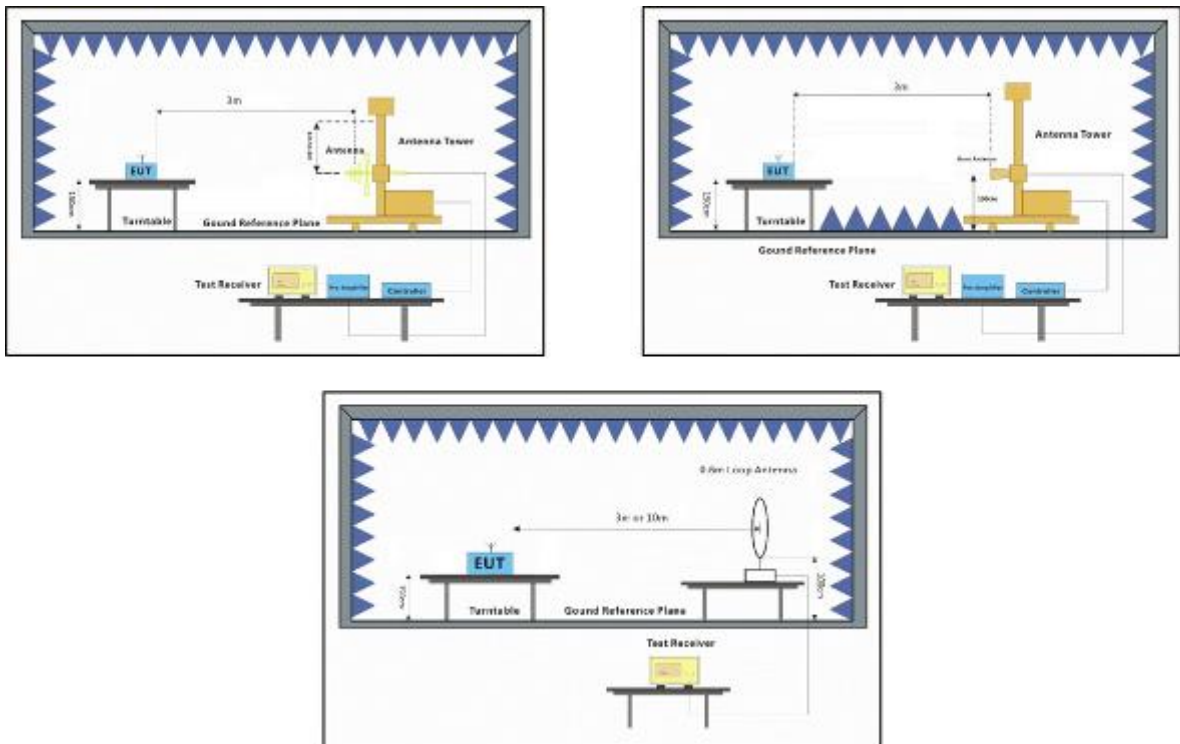
**7.8.1 E.U.T. Operation**

Operating Environment:

Temperature: 24.4 °C Humidity: 50.1 % RH Atmospheric Pressure: 1020 mbar

Test mode b: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.

**7.8.2 Test Setup Diagram**



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**7.8.3 Measurement Procedure and Data**

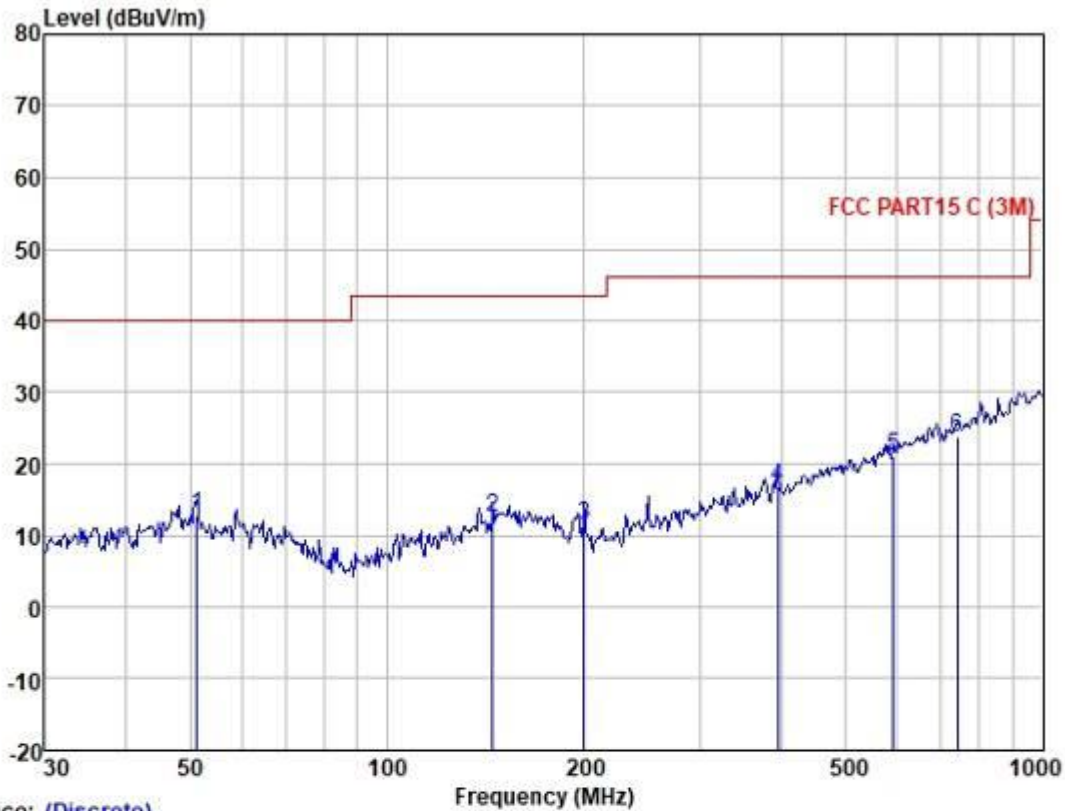
- a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 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 and modulation b. 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



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



Trace: (Discrete)

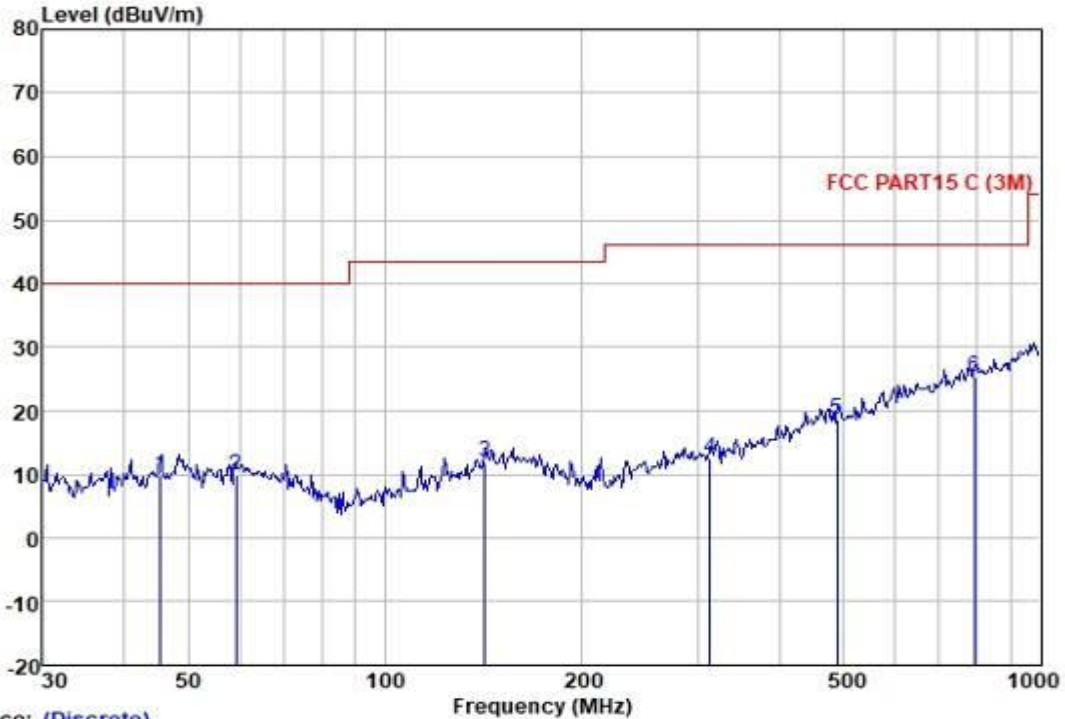
	ReadAntenna	Cable	Preamp	Limit	Over					
Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark	
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB			
1	51.121	24.86	13.95	1.21	27.17	12.85	40.00	-27.15	VERTICAL	QP
2	144.842	23.81	13.65	2.02	26.91	12.57	43.50	-30.93	VERTICAL	QP
3	199.986	25.44	10.20	2.50	26.79	11.35	43.50	-32.15	VERTICAL	QP
4	394.855	25.35	15.60	3.82	27.89	16.88	46.00	-29.12	VERTICAL	QP
5	590.974	24.79	19.50	4.78	28.07	21.00	46.00	-25.00	VERTICAL	QP
6	739.661	24.64	22.00	5.24	28.11	23.77	46.00	-22.23	VERTICAL	QP



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



Trace: (Discrete)

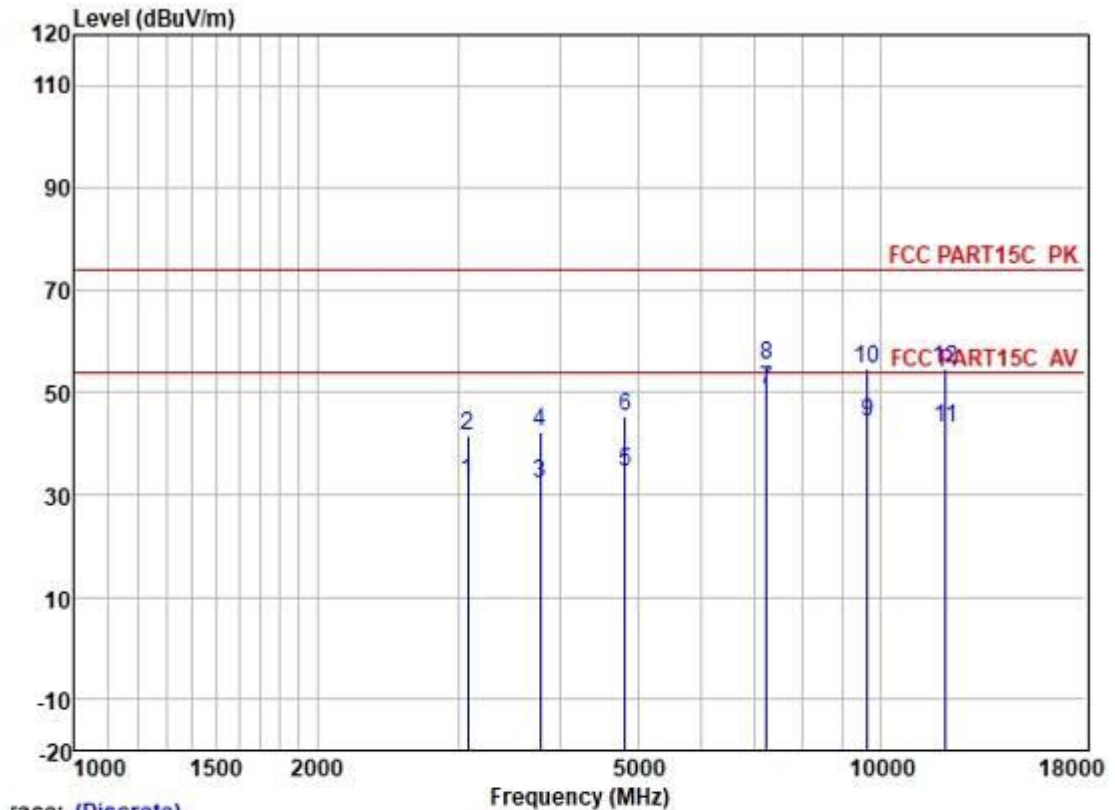
	Freq	ReadAntenna	Cable	Preamp	Limit	Over			
	MHz	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark
		dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB	
1	45.375	22.03	13.87	1.19	27.17	9.92	40.00	-30.08	HORIZONTAL QP
2	59.232	22.27	13.48	1.32	27.16	9.91	40.00	-30.09	HORIZONTAL QP
3	141.826	23.38	13.50	1.99	26.94	11.93	43.50	-31.57	HORIZONTAL QP
4	313.276	22.85	14.04	2.99	27.35	12.53	46.00	-33.47	HORIZONTAL QP
5	489.027	24.95	17.77	4.06	28.04	18.74	46.00	-27.26	HORIZONTAL QP
6	793.396	25.13	22.53	5.78	28.12	25.32	46.00	-20.68	HORIZONTAL QP



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



Trace: (Discrete)

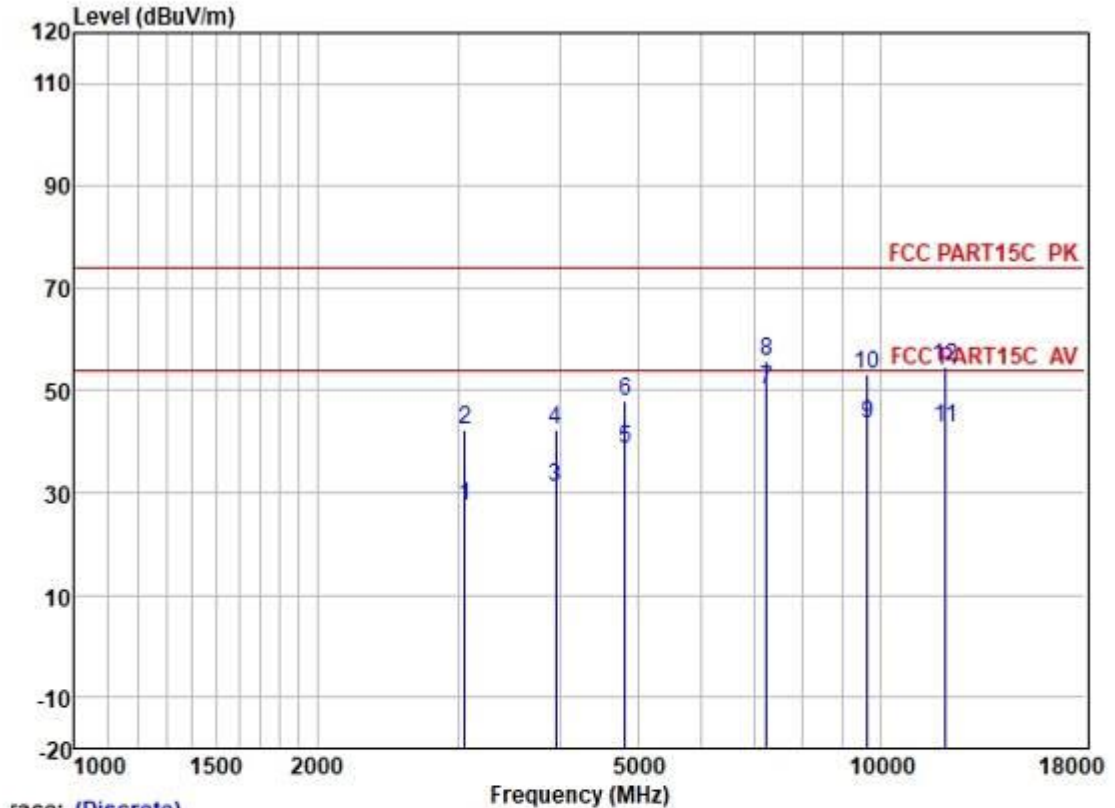
	Read Freq	Antenna Level	Cable Factor	Preamp Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	3078.229	36.94	28.46	3.88	36.54	32.74	54.00	-21.26	HORIZONTAL	Average
2	3078.229	45.89	28.46	3.88	36.54	41.69	74.00	-32.31	HORIZONTAL	Peak
3	3790.361	34.54	29.50	4.60	36.42	32.22	54.00	-21.78	HORIZONTAL	Average
4	3790.361	44.60	29.50	4.60	36.42	42.28	74.00	-31.72	HORIZONTAL	Peak
5	4824.058	34.18	31.45	5.42	36.48	34.57	54.00	-19.43	HORIZONTAL	Average
6	4824.058	44.89	31.45	5.42	36.48	45.28	74.00	-28.72	HORIZONTAL	Peak
7	7236.810	45.53	35.70	6.03	36.75	50.51	54.00	-3.49	HORIZONTAL	Average
8	7236.810	50.40	35.70	6.03	36.75	55.38	74.00	-18.62	HORIZONTAL	Peak
9	9648.925	35.21	38.40	7.06	36.35	44.32	54.00	-9.68	HORIZONTAL	Average
10	9648.925	45.38	38.40	7.06	36.35	54.49	74.00	-19.51	HORIZONTAL	Peak
11	12060.520	32.51	38.88	8.17	36.38	43.18	54.00	-10.82	HORIZONTAL	Average
12	12060.520	43.87	38.88	8.17	36.38	54.54	74.00	-19.46	HORIZONTAL	Peak



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



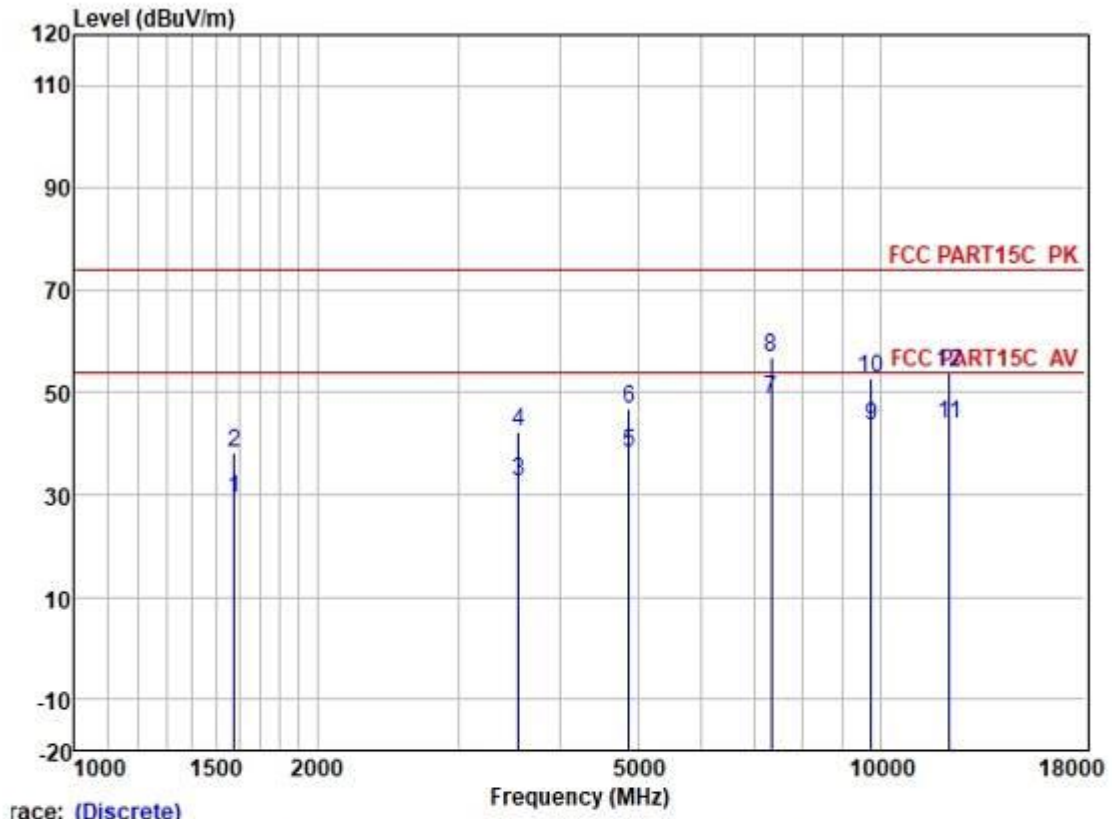
Trace: (Discrete)

	Read Freq	Antenna Level	Cable Factor	Preamp Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	3051.653	31.53	28.44	3.85	36.55	27.27	54.00	-26.73	VERTICAL	Average
2	3051.653	46.65	28.44	3.85	36.55	42.39	74.00	-31.61	VERTICAL	Peak
3	3958.309	33.19	29.75	4.60	36.40	31.14	54.00	-22.86	VERTICAL	Average
4	3958.309	44.44	29.75	4.60	36.40	42.39	74.00	-31.61	VERTICAL	Peak
5	4824.016	38.15	31.45	5.42	36.48	38.54	54.00	-15.46	VERTICAL	Average
6	4824.016	47.48	31.45	5.42	36.48	47.87	74.00	-26.13	VERTICAL	Peak
7	7235.308	45.24	35.70	6.03	36.75	50.22	54.00	-3.78	VERTICAL	Average
8	7235.308	50.67	35.70	6.03	36.75	55.65	74.00	-18.35	VERTICAL	Peak
9	9648.543	34.52	38.40	7.06	36.35	43.63	54.00	-10.37	VERTICAL	Average
10	9648.543	44.03	38.40	7.06	36.35	53.14	74.00	-20.86	VERTICAL	Peak
11	12060.270	32.05	38.88	8.17	36.38	42.72	54.00	-11.28	VERTICAL	Average
12	12060.270	43.85	38.88	8.17	36.38	54.52	74.00	-19.48	VERTICAL	Peak



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



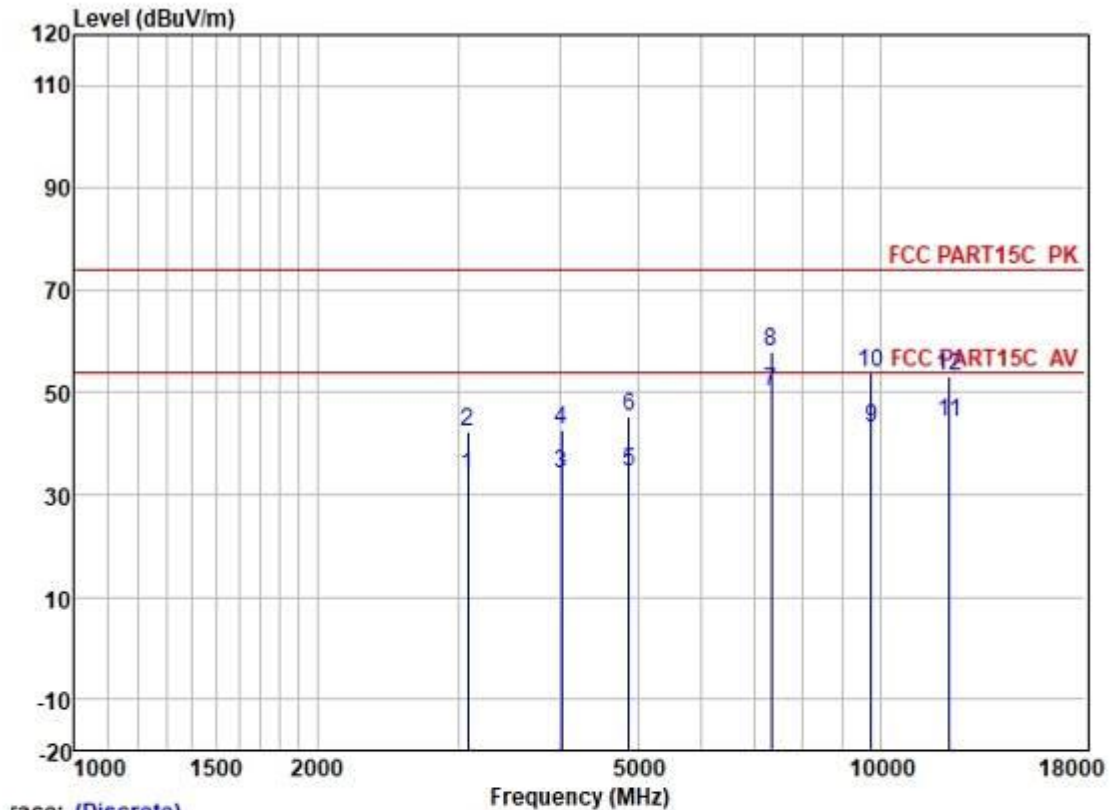
Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1578.822	37.95	25.56	2.80	37.08	29.23	54.00	-24.77	HORIZONTAL	Average
2	1578.822	46.95	25.56	2.80	37.08	38.23	74.00	-35.77	HORIZONTAL	Peak
3	3556.843	35.84	28.98	4.44	36.45	32.81	54.00	-21.19	HORIZONTAL	Average
4	3556.843	45.43	28.98	4.44	36.45	42.40	74.00	-31.60	HORIZONTAL	Peak
5	4884.151	37.50	31.56	5.52	36.50	38.08	54.00	-15.92	HORIZONTAL	Average
6	4884.151	46.34	31.56	5.52	36.50	46.92	74.00	-27.08	HORIZONTAL	Peak
7	7325.740	43.19	36.00	6.13	36.76	48.56	54.00	-5.44	HORIZONTAL	Average
8	7325.740	51.56	36.00	6.13	36.76	56.93	74.00	-17.07	HORIZONTAL	Peak
9	9768.063	34.15	38.53	7.01	36.33	43.36	54.00	-10.64	HORIZONTAL	Average
10	9768.063	43.50	38.53	7.01	36.33	52.71	74.00	-21.29	HORIZONTAL	Peak
11	12205.760	33.29	38.74	8.08	36.30	43.81	54.00	-10.19	HORIZONTAL	Average
12	12205.760	43.40	38.74	8.08	36.30	53.92	74.00	-20.08	HORIZONTAL	Peak



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



Trace: (Discrete)

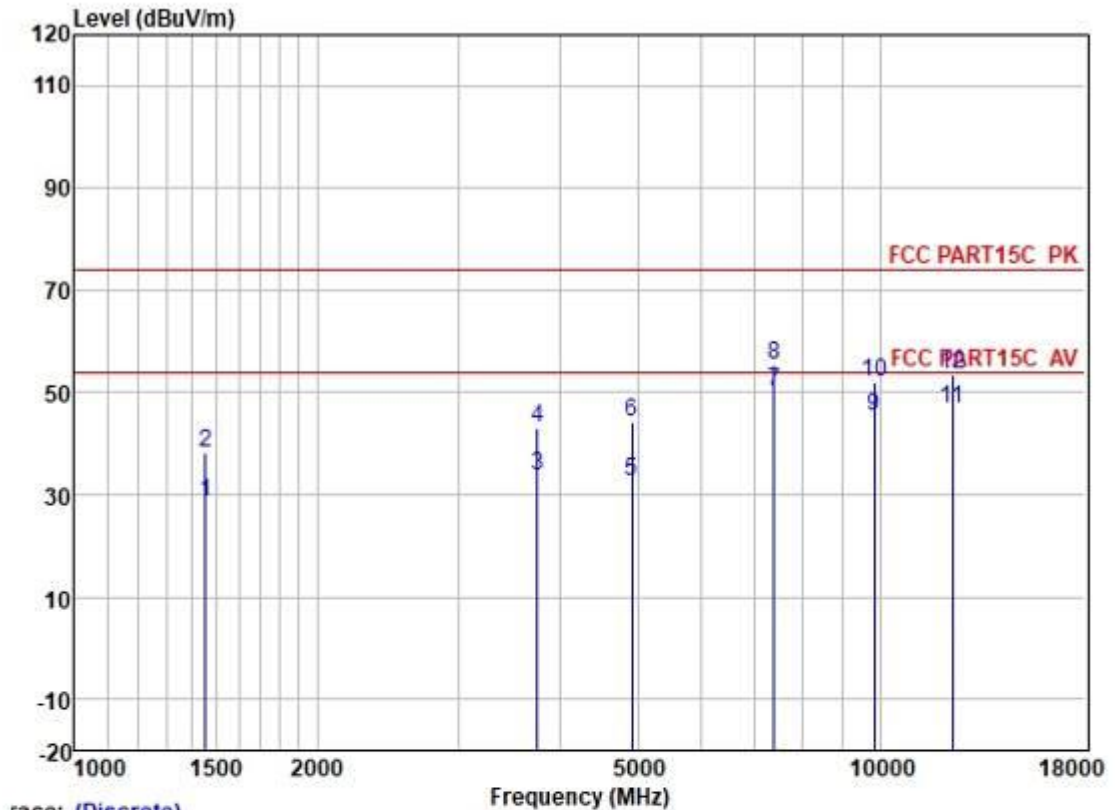
	Read	Antenna	Cable	Preamp	Limit	Over				
Freq	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark		
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB			
1	3078.229	37.83	28.46	3.88	36.54	33.63	54.00	-20.37	VERTICAL	Average
2	3078.229	46.41	28.46	3.88	36.54	42.21	74.00	-31.79	VERTICAL	Peak
3	4027.554	35.98	29.83	4.60	36.40	34.01	54.00	-19.99	VERTICAL	Average
4	4027.554	44.60	29.83	4.60	36.40	42.63	74.00	-31.37	VERTICAL	Peak
5	4884.151	34.06	31.56	5.52	36.50	34.64	54.00	-19.36	VERTICAL	Average
6	4884.151	44.84	31.56	5.52	36.50	45.42	74.00	-28.58	VERTICAL	Peak
7	7325.460	44.90	36.00	6.13	36.76	50.27	54.00	-3.73	VERTICAL	Average
8	7325.460	52.79	36.00	6.13	36.76	58.16	74.00	-15.84	VERTICAL	Peak
9	9768.187	33.86	38.53	7.01	36.33	43.07	54.00	-10.93	VERTICAL	Average
10	9768.187	44.54	38.53	7.01	36.33	53.75	74.00	-20.25	VERTICAL	Peak
11	12210.280	33.71	38.74	8.08	36.30	44.23	54.00	-9.77	VERTICAL	Average
12	12210.280	42.82	38.74	8.08	36.30	53.34	74.00	-20.66	VERTICAL	Peak



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



Trace: (Discrete)

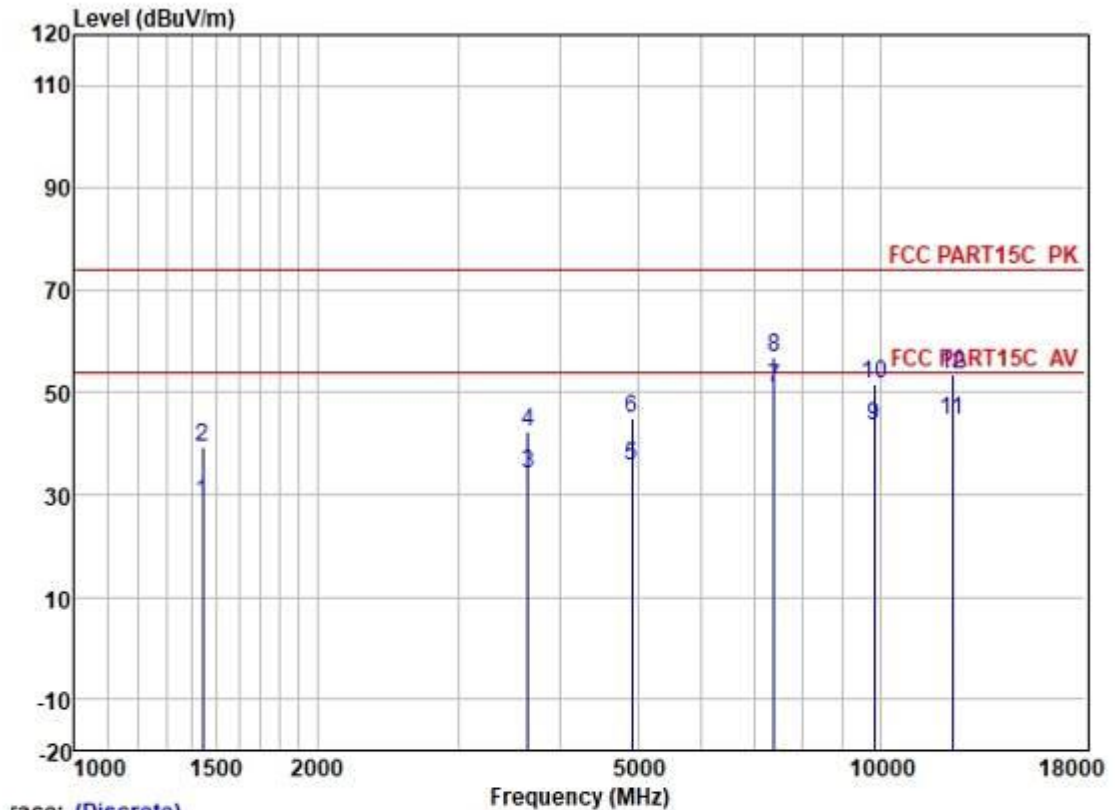
	Read	Antenna	Cable	Preamp	Limit	Over			
Freq	Level	Factor	Loss	Factor	Line	Limit	Pol/Phase	Remark	
MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1456.081	37.59	25.46	2.72	37.15	28.62	54.00	-25.38	HORIZONTAL Average
2	1456.081	47.18	25.46	2.72	37.15	38.21	74.00	-35.79	HORIZONTAL Peak
3	3757.637	36.21	29.42	4.58	36.42	33.79	54.00	-20.21	HORIZONTAL Average
4	3757.637	45.38	29.42	4.58	36.42	42.96	74.00	-31.04	HORIZONTAL Peak
5	4924.151	31.94	31.62	5.60	36.50	32.66	54.00	-21.34	HORIZONTAL Average
6	4924.151	43.39	31.62	5.60	36.50	44.11	74.00	-29.89	HORIZONTAL Peak
7	7380.288	44.72	36.17	6.19	36.76	50.32	54.00	-3.68	HORIZONTAL Average
8	7380.288	49.79	36.17	6.19	36.76	55.39	74.00	-18.61	HORIZONTAL Peak
9	9848.684	36.25	38.58	6.99	36.32	45.50	54.00	-8.50	HORIZONTAL Average
10	9848.684	42.97	38.58	6.99	36.32	52.22	74.00	-21.78	HORIZONTAL Peak
11	12310.740	36.26	38.63	8.01	36.23	46.67	54.00	-7.33	HORIZONTAL Average
12	12310.740	43.16	38.63	8.01	36.23	53.57	74.00	-20.43	HORIZONTAL Peak



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



Trace: (Discrete)

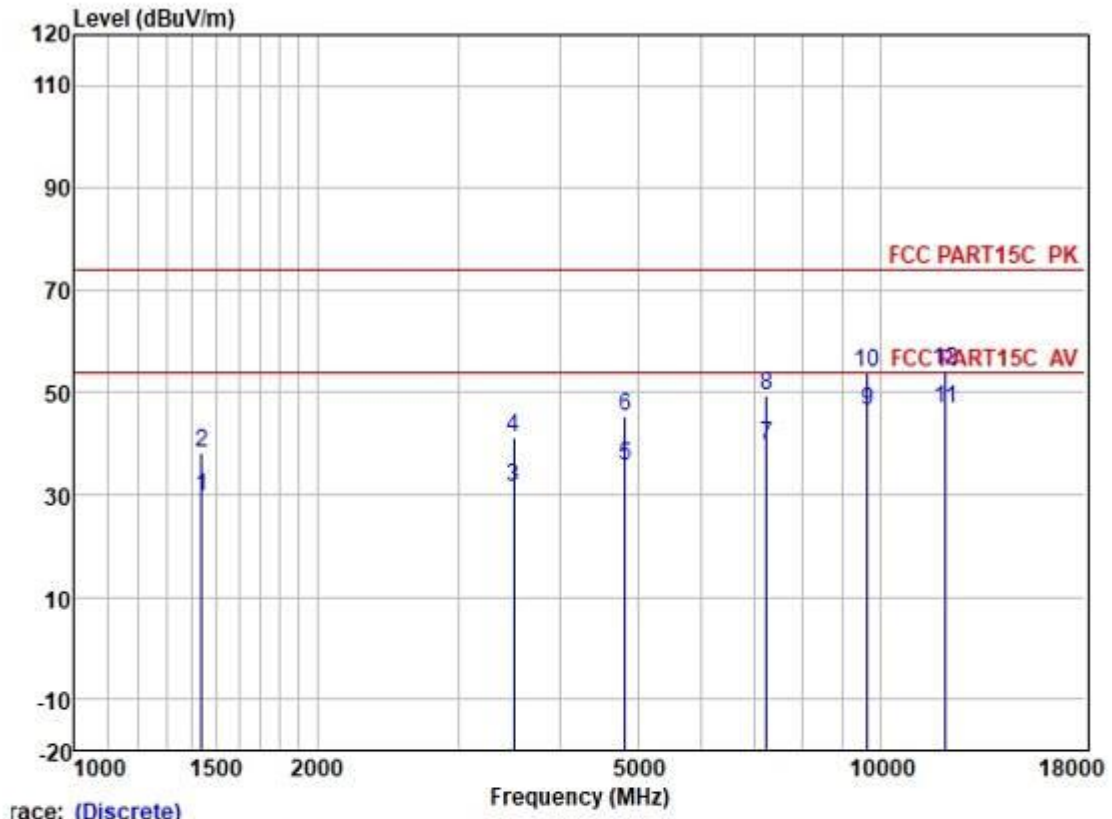
	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1443.509	37.49	25.44	2.69	37.16	28.46	54.00	-25.54	VERTICAL	Average
2	1443.509	48.49	25.44	2.69	37.16	39.46	74.00	-34.54	VERTICAL	Peak
3	3661.149	36.98	29.15	4.53	36.43	34.23	54.00	-19.77	VERTICAL	Average
4	3661.149	45.04	29.15	4.53	36.43	42.29	74.00	-31.71	VERTICAL	Peak
5	4924.339	34.77	31.62	5.60	36.50	35.49	54.00	-18.51	VERTICAL	Average
6	4924.339	44.33	31.62	5.60	36.50	45.05	74.00	-28.95	VERTICAL	Peak
7	7392.432	45.38	36.17	6.19	36.77	50.97	54.00	-3.03	VERTICAL	Average
8	7392.432	51.43	36.17	6.19	36.77	57.02	74.00	-16.98	VERTICAL	Peak
9	9848.689	34.06	38.58	6.99	36.32	43.31	54.00	-10.69	VERTICAL	Average
10	9848.689	42.48	38.58	6.99	36.32	51.73	74.00	-22.27	VERTICAL	Peak
11	12310.520	34.19	38.63	8.01	36.23	44.60	54.00	-9.40	VERTICAL	Average
12	12310.520	43.20	38.63	8.01	36.23	53.61	74.00	-20.39	VERTICAL	Peak



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



Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1439.343	38.66	25.44	2.68	37.16	29.62	54.00	-24.38	HORIZONTAL	Average
2	1439.343	47.35	25.44	2.68	37.16	38.31	74.00	-35.69	HORIZONTAL	Peak
3	3505.809	34.59	28.91	4.33	36.45	31.38	54.00	-22.62	HORIZONTAL	Average
4	3505.809	44.27	28.91	4.33	36.45	41.06	74.00	-32.94	HORIZONTAL	Peak
5	4824.948	35.15	31.45	5.42	36.48	35.54	54.00	-18.46	HORIZONTAL	Average
6	4824.948	44.86	31.45	5.42	36.48	45.25	74.00	-28.75	HORIZONTAL	Peak
7	7236.052	34.68	35.70	6.03	36.75	39.66	54.00	-14.34	HORIZONTAL	Average
8	7236.052	44.63	35.70	6.03	36.75	49.61	74.00	-24.39	HORIZONTAL	Peak
9	9648.151	37.23	38.40	7.06	36.35	46.34	54.00	-7.66	HORIZONTAL	Average
10	9648.151	44.71	38.40	7.06	36.35	53.82	74.00	-20.18	HORIZONTAL	Peak
11	12060.520	36.10	38.88	8.17	36.38	46.77	54.00	-7.23	HORIZONTAL	Average
12	12060.520	43.76	38.88	8.17	36.38	54.43	74.00	-19.57	HORIZONTAL	Peak



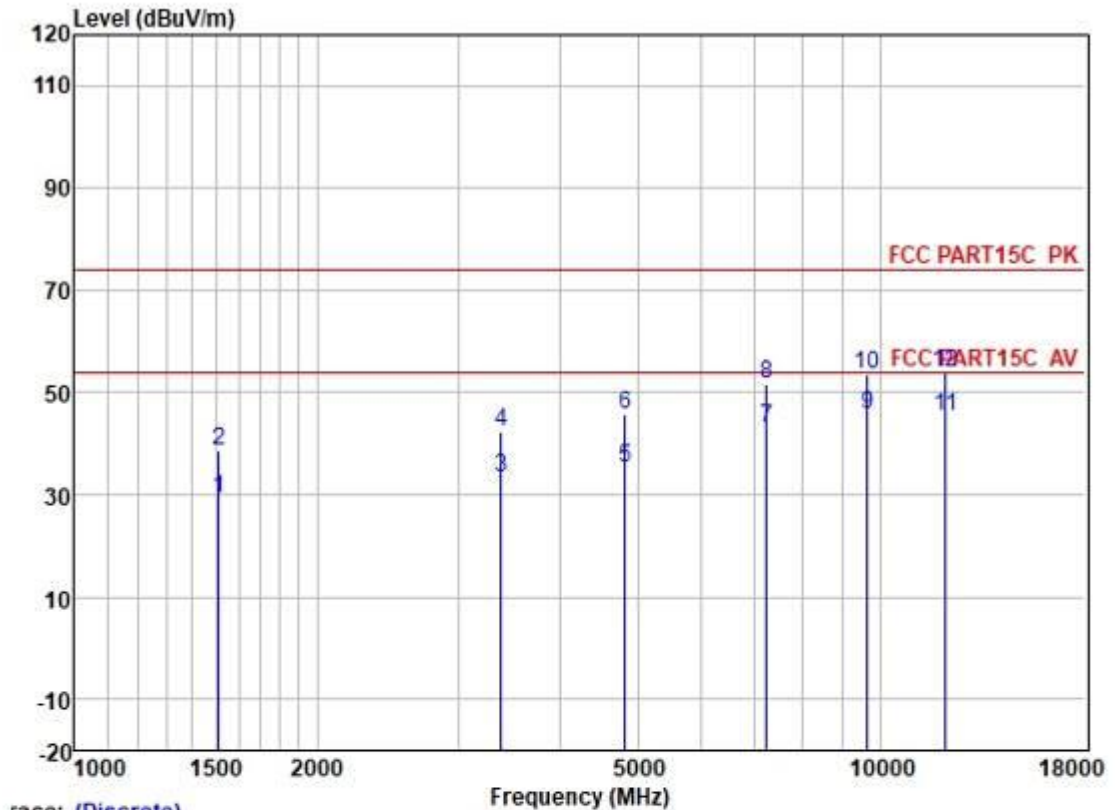
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Mode:b; Polarization:Vertical; Modulation:g; bandwidth:20MHz; Channel:Low



Trace: (Discrete)

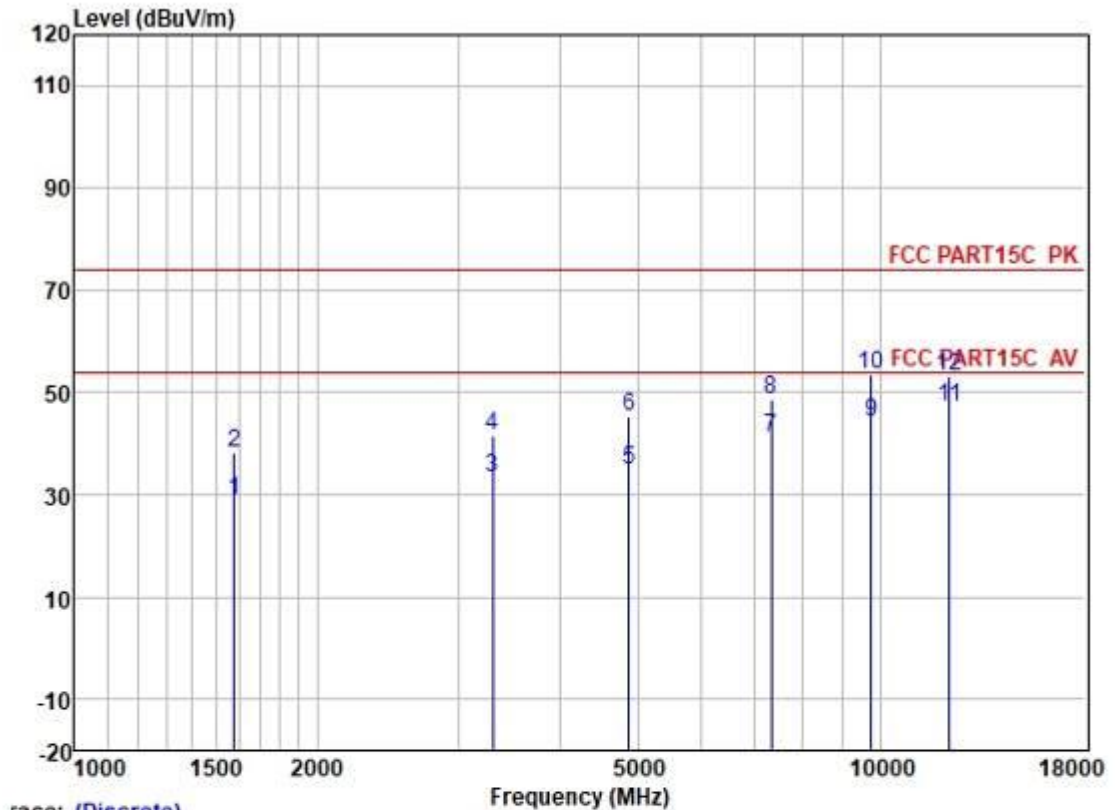
	Read	Antenna	Cable	Preamp	Limit	Over				
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1511.833	37.94	25.51	2.80	37.11	29.14	54.00	-24.86	VERTICAL	Average
2	1511.833	47.48	25.51	2.80	37.11	38.68	74.00	-35.32	VERTICAL	Peak
3	3386.297	36.98	28.83	4.10	36.47	33.44	54.00	-20.56	VERTICAL	Average
4	3386.297	45.99	28.83	4.10	36.47	42.45	74.00	-31.55	VERTICAL	Peak
5	4824.016	34.75	31.45	5.42	36.48	35.14	54.00	-18.86	VERTICAL	Average
6	4824.016	45.45	31.45	5.42	36.48	45.84	74.00	-28.16	VERTICAL	Peak
7	7236.052	37.95	35.70	6.03	36.75	42.93	54.00	-11.07	VERTICAL	Average
8	7236.052	46.81	35.70	6.03	36.75	51.79	74.00	-22.21	VERTICAL	Peak
9	9648.603	36.59	38.40	7.06	36.35	45.70	54.00	-8.30	VERTICAL	Average
10	9648.603	44.61	38.40	7.06	36.35	53.72	74.00	-20.28	VERTICAL	Peak
11	12060.710	34.67	38.88	8.17	36.38	45.34	54.00	-8.66	VERTICAL	Average
12	12060.710	43.29	38.88	8.17	36.38	53.96	74.00	-20.04	VERTICAL	Peak



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



Trace: (Discrete)

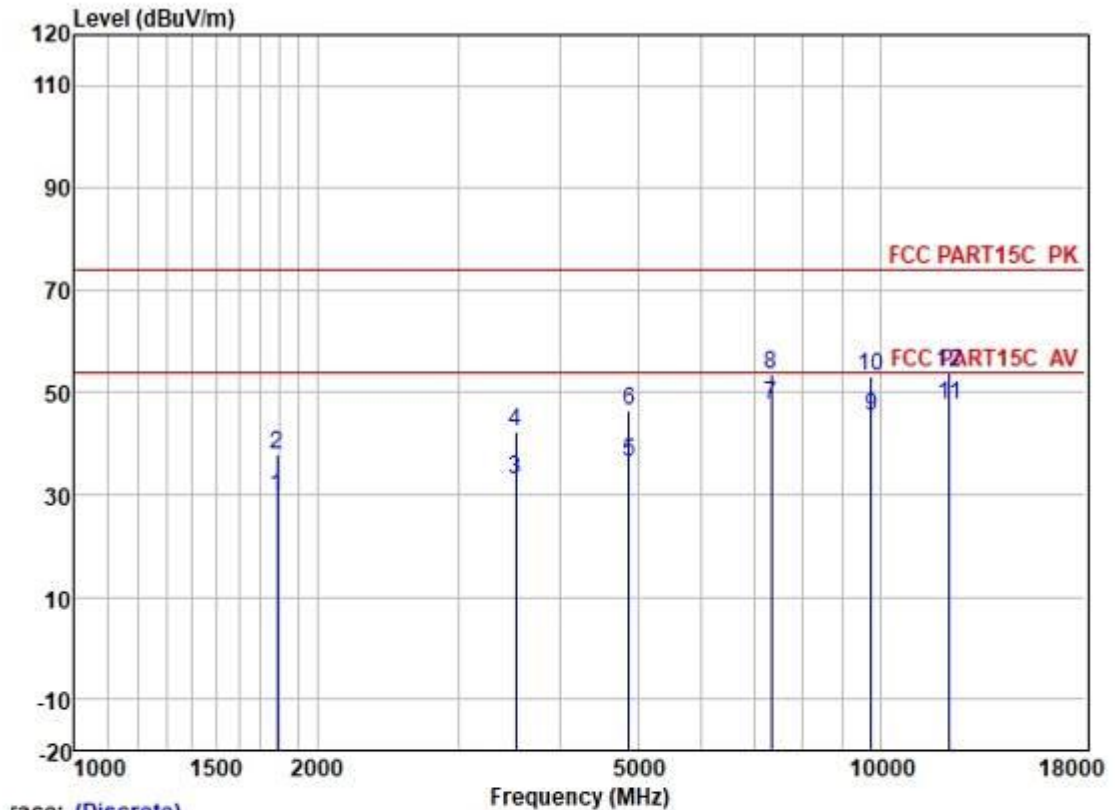
	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1578.822	37.58	25.56	2.80	37.08	28.86	54.00	-25.14	HORIZONTAL	Average
2	1578.822	46.85	25.56	2.80	37.08	38.13	74.00	-35.87	HORIZONTAL	Peak
3	3308.894	36.95	28.76	4.06	36.48	33.29	54.00	-20.71	HORIZONTAL	Average
4	3308.894	45.13	28.76	4.06	36.48	41.47	74.00	-32.53	HORIZONTAL	Peak
5	4884.490	34.16	31.56	5.52	36.50	34.74	54.00	-19.26	HORIZONTAL	Average
6	4884.490	44.89	31.56	5.52	36.50	45.47	74.00	-28.53	HORIZONTAL	Peak
7	7326.052	35.90	36.00	6.13	36.76	41.27	54.00	-12.73	HORIZONTAL	Average
8	7326.052	43.17	36.00	6.13	36.76	48.54	74.00	-25.46	HORIZONTAL	Peak
9	9768.062	35.13	38.53	7.01	36.33	44.34	54.00	-9.66	HORIZONTAL	Average
10	9768.062	44.18	38.53	7.01	36.33	53.39	74.00	-20.61	HORIZONTAL	Peak
11	12210.250	36.71	38.74	8.08	36.30	47.23	54.00	-6.77	HORIZONTAL	Average
12	12210.250	42.62	38.74	8.08	36.30	53.14	74.00	-20.86	HORIZONTAL	Peak



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



Trace: (Discrete)

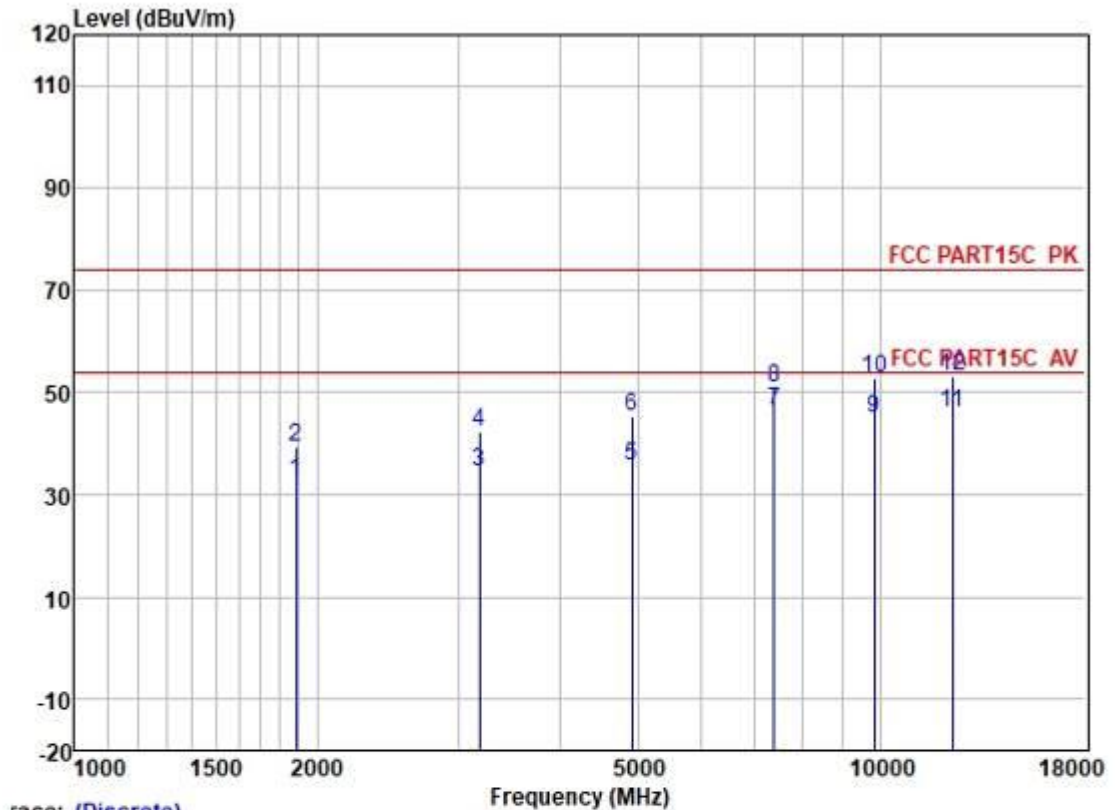
	Read Freq	Antenna Level	Cable Factor	Preamp Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1782.602	37.88	25.92	2.97	37.03	29.74	54.00	-24.26	VERTICAL	Average
2	1782.602	46.12	25.92	2.97	37.03	37.98	74.00	-36.02	VERTICAL	Peak
3	3526.134	36.25	28.94	4.38	36.45	33.12	54.00	-20.88	VERTICAL	Average
4	3526.134	45.36	28.94	4.38	36.45	42.23	74.00	-31.77	VERTICAL	Peak
5	4884.948	35.72	31.56	5.52	36.50	36.30	54.00	-17.70	VERTICAL	Average
6	4884.948	45.90	31.56	5.52	36.50	46.48	74.00	-27.52	VERTICAL	Peak
7	7329.707	42.06	36.00	6.13	36.76	47.43	54.00	-6.57	VERTICAL	Average
8	7329.707	48.16	36.00	6.13	36.76	53.53	74.00	-20.47	VERTICAL	Peak
9	9768.432	35.97	38.53	7.01	36.33	45.18	54.00	-8.82	VERTICAL	Average
10	9768.432	43.95	38.53	7.01	36.33	53.16	74.00	-20.84	VERTICAL	Peak
11	12210.740	37.20	38.74	8.08	36.30	47.72	54.00	-6.28	VERTICAL	Average
12	12210.740	43.47	38.74	8.08	36.30	53.99	74.00	-20.01	VERTICAL	Peak



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



Trace: (Discrete)

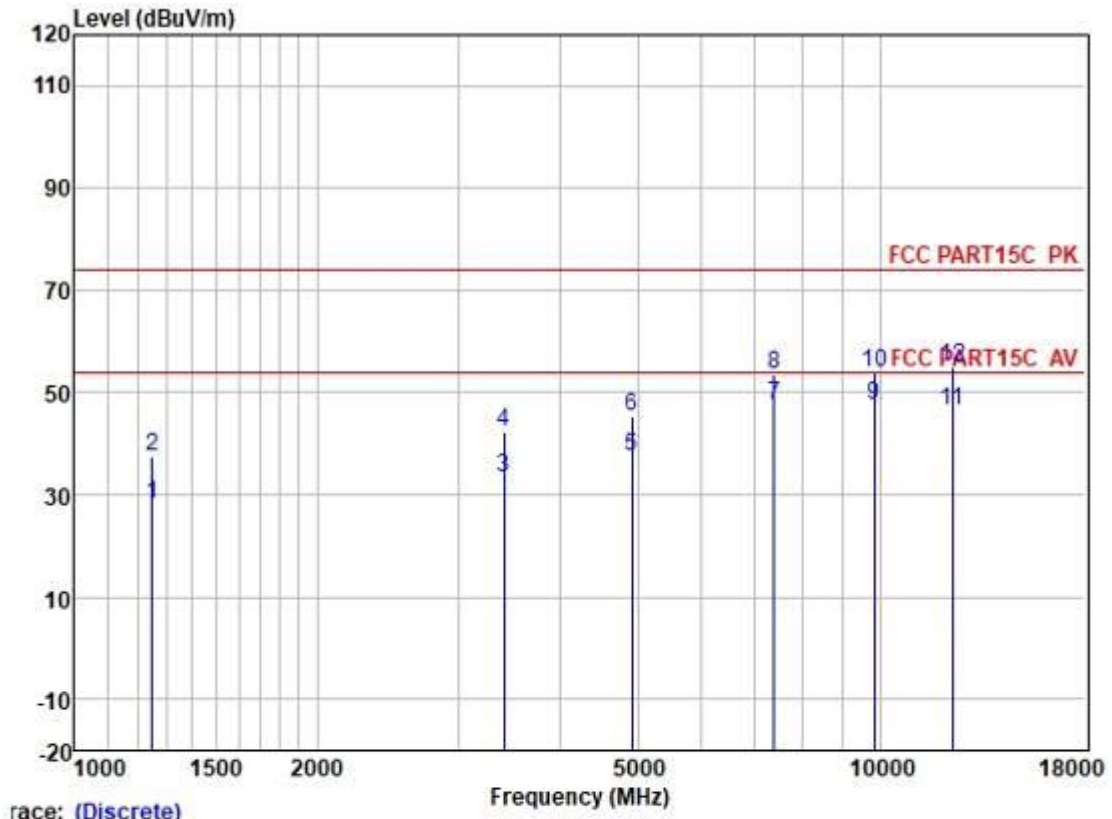
	Read	Antenna	Cable	Preamp	Limit	Over				
	Freq	Level	Factor	Loss	Factor	Level	Line	Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1883.236	40.67	26.03	2.91	37.01	32.60	54.00	-21.40	HORIZONTAL	Average
2	1883.236	47.27	26.03	2.91	37.01	39.20	74.00	-34.80	HORIZONTAL	Peak
3	3177.672	38.28	28.56	3.99	36.51	34.32	54.00	-19.68	HORIZONTAL	Average
4	3177.672	46.16	28.56	3.99	36.51	42.20	74.00	-31.80	HORIZONTAL	Peak
5	4924.419	34.76	31.62	5.60	36.50	35.48	54.00	-18.52	HORIZONTAL	Average
6	4924.419	44.61	31.62	5.60	36.50	45.33	74.00	-28.67	HORIZONTAL	Peak
7	7386.070	40.69	36.17	6.19	36.77	46.28	54.00	-7.72	HORIZONTAL	Average
8	7386.070	45.30	36.17	6.19	36.77	50.89	74.00	-23.11	HORIZONTAL	Peak
9	9848.151	35.88	38.58	6.99	36.32	45.13	54.00	-8.87	HORIZONTAL	Average
10	9848.151	43.42	38.58	6.99	36.32	52.67	74.00	-21.33	HORIZONTAL	Peak
11	12310.420	35.59	38.63	8.01	36.23	46.00	54.00	-8.00	HORIZONTAL	Average
12	12310.420	42.87	38.63	8.01	36.23	53.28	74.00	-20.72	HORIZONTAL	Peak



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



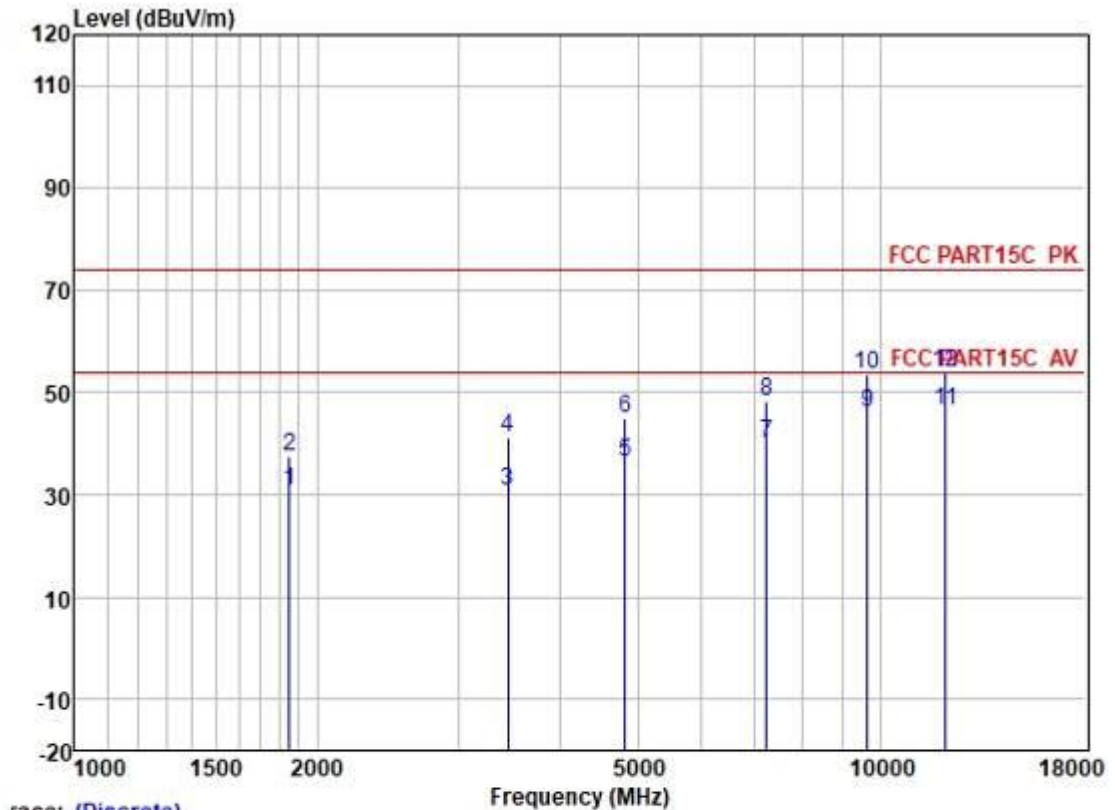
Trace: (Discrete)

	Read Freq	Antenna Level	Cable Factor	Preamp Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1249.269	38.17	25.02	2.34	37.33	28.20	54.00	-25.80	VERTICAL	Average
2	1249.269	47.37	25.02	2.34	37.33	37.40	74.00	-36.60	VERTICAL	Peak
3	3415.787	36.99	28.85	4.13	36.47	33.50	54.00	-20.50	VERTICAL	Average
4	3415.787	45.70	28.85	4.13	36.47	42.21	74.00	-31.79	VERTICAL	Peak
5	4924.490	36.85	31.62	5.60	36.50	37.57	54.00	-16.43	VERTICAL	Average
6	4924.490	44.68	31.62	5.60	36.50	45.40	74.00	-28.60	VERTICAL	Peak
7	7386.741	41.84	36.17	6.19	36.77	47.43	54.00	-6.57	VERTICAL	Average
8	7386.741	47.83	36.17	6.19	36.77	53.42	74.00	-20.58	VERTICAL	Peak
9	9848.684	38.16	38.58	6.99	36.32	47.41	54.00	-6.59	VERTICAL	Average
10	9848.684	44.83	38.58	6.99	36.32	54.08	74.00	-19.92	VERTICAL	Peak
11	12310.130	35.86	38.63	8.01	36.23	46.27	54.00	-7.73	VERTICAL	Average
12	12310.130	44.70	38.63	8.01	36.23	55.11	74.00	-18.89	VERTICAL	Peak



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



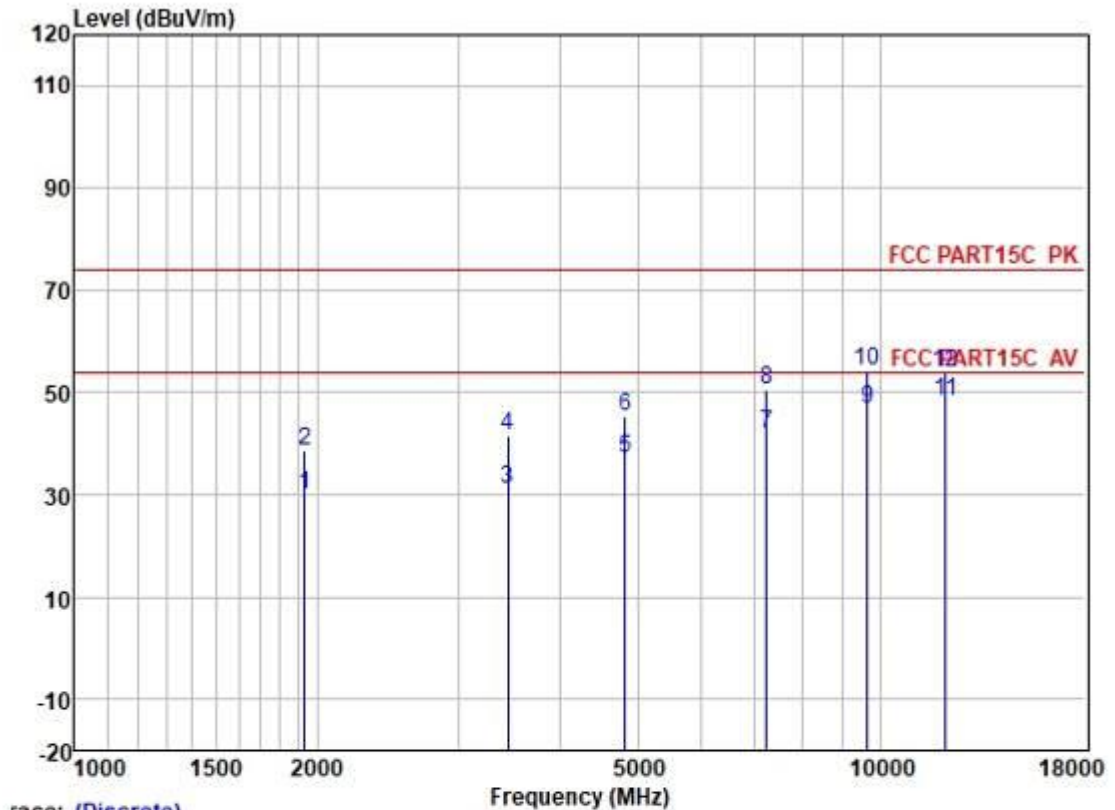
Trace: (Discrete)

	Read Freq	Antenna Level	Cable Factor	Preamp Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1850.858	38.67	26.00	2.94	37.02	30.59	54.00	-23.41	HORIZONTAL	Average
2	1850.858	45.45	26.00	2.94	37.02	37.37	74.00	-36.63	HORIZONTAL	Peak
3	3455.508	34.15	28.88	4.20	36.46	30.77	54.00	-23.23	HORIZONTAL	Average
4	3455.508	44.77	28.88	4.20	36.46	41.39	74.00	-32.61	HORIZONTAL	Peak
5	4824.975	35.85	31.45	5.42	36.48	36.24	54.00	-17.76	HORIZONTAL	Average
6	4824.975	44.55	31.45	5.42	36.48	44.94	74.00	-29.06	HORIZONTAL	Peak
7	7236.806	35.17	35.70	6.03	36.75	40.15	54.00	-13.85	HORIZONTAL	Average
8	7236.806	43.32	35.70	6.03	36.75	48.30	74.00	-25.70	HORIZONTAL	Peak
9	9648.430	36.86	38.40	7.06	36.35	45.97	54.00	-8.03	HORIZONTAL	Average
10	9648.430	44.27	38.40	7.06	36.35	53.38	74.00	-20.62	HORIZONTAL	Peak
11	12060.270	35.75	38.88	8.17	36.38	46.42	54.00	-7.58	HORIZONTAL	Average
12	12060.270	43.31	38.88	8.17	36.38	53.98	74.00	-20.02	HORIZONTAL	Peak



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



Trace: (Discrete)

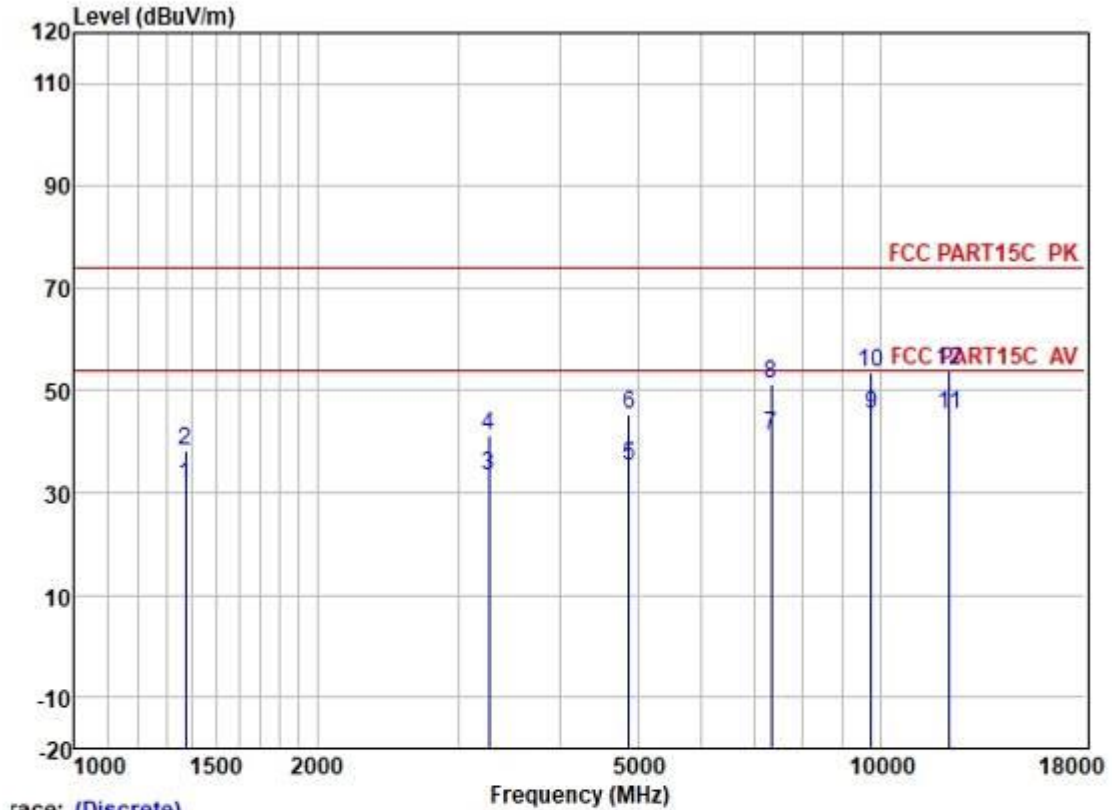
	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1932.868	38.00	26.06	2.96	37.01	30.01	54.00	-23.99	VERTICAL	Average
2	1932.868	46.74	26.06	2.96	37.01	38.75	74.00	-35.25	VERTICAL	Peak
3	3455.508	34.51	28.88	4.20	36.46	31.13	54.00	-22.87	VERTICAL	Average
4	3455.508	44.99	28.88	4.20	36.46	41.61	74.00	-32.39	VERTICAL	Peak
5	4824.721	36.61	31.45	5.42	36.48	37.00	54.00	-17.00	VERTICAL	Average
6	4824.721	44.96	31.45	5.42	36.48	45.35	74.00	-28.65	VERTICAL	Peak
7	7236.052	36.85	35.70	6.03	36.75	41.83	54.00	-12.17	VERTICAL	Average
8	7236.052	45.73	35.70	6.03	36.75	50.71	74.00	-23.29	VERTICAL	Peak
9	9648.151	37.59	38.40	7.06	36.35	46.70	54.00	-7.30	VERTICAL	Average
10	9648.151	45.16	38.40	7.06	36.35	54.27	74.00	-19.73	VERTICAL	Peak
11	12060.950	37.51	38.88	8.17	36.38	48.18	54.00	-5.82	VERTICAL	Average
12	12060.950	43.27	38.88	8.17	36.38	53.94	74.00	-20.06	VERTICAL	Peak



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



Trace: (Discrete)

	Read Freq	Antenna Level	Cable Factor	Preamp Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1374.295	41.00	25.35	2.60	37.25	31.70	54.00	-22.30	HORIZONTAL	Average
2	1374.295	47.42	25.35	2.60	37.25	38.12	74.00	-35.88	HORIZONTAL	Peak
3	3270.858	36.98	28.71	4.04	36.49	33.24	54.00	-20.76	HORIZONTAL	Average
4	3270.858	44.79	28.71	4.04	36.49	41.05	74.00	-32.95	HORIZONTAL	Peak
5	4884.151	34.79	31.56	5.52	36.50	35.37	54.00	-18.63	HORIZONTAL	Average
6	4884.151	44.75	31.56	5.52	36.50	45.33	74.00	-28.67	HORIZONTAL	Peak
7	7326.267	35.82	36.00	6.13	36.76	41.19	54.00	-12.81	HORIZONTAL	Average
8	7326.267	45.95	36.00	6.13	36.76	51.32	74.00	-22.68	HORIZONTAL	Peak
9	9768.349	35.98	38.53	7.01	36.33	45.19	54.00	-8.81	HORIZONTAL	Average
10	9768.349	44.16	38.53	7.01	36.33	53.37	74.00	-20.63	HORIZONTAL	Peak
11	12210.210	34.76	38.74	8.08	36.30	45.28	54.00	-8.72	HORIZONTAL	Average
12	12210.210	43.22	38.74	8.08	36.30	53.74	74.00	-20.26	HORIZONTAL	Peak

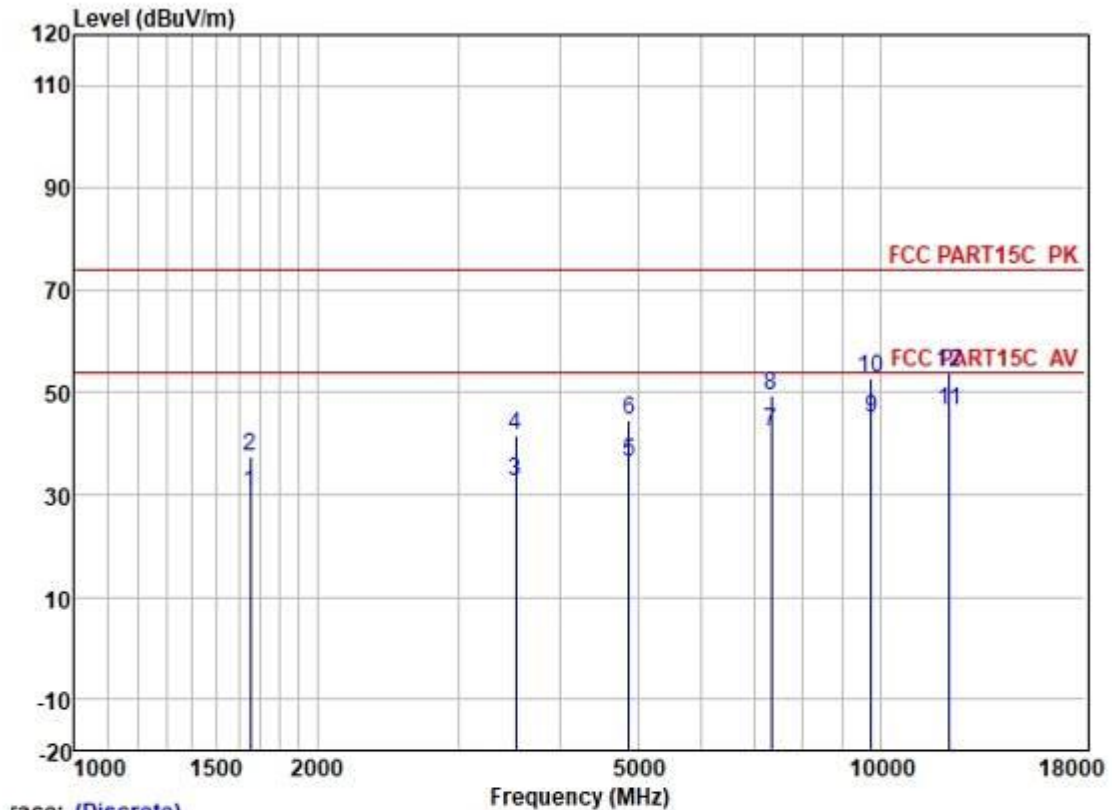


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Mode:b; Polarization:Vertical; Modulation:n; bandwidth:20MHz; Channel:middle



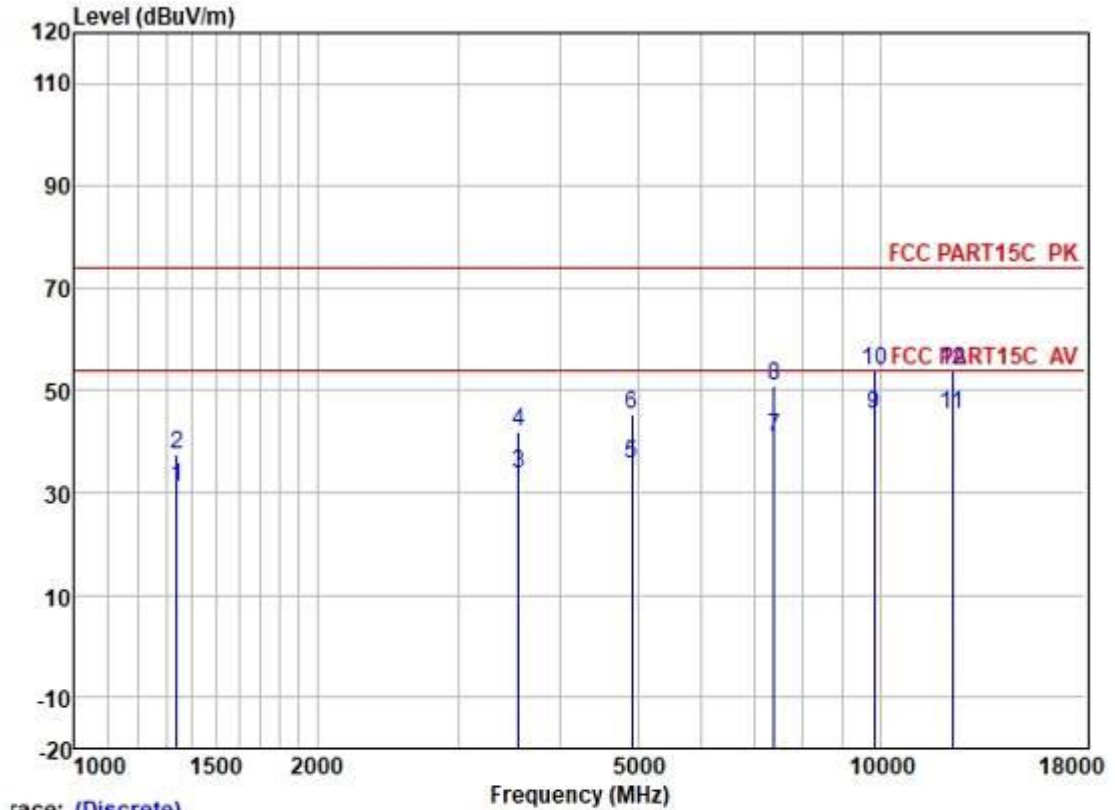
Trace: (Discrete)

	Read Freq	Antenna Level	Cable Factor	Preamp Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1653.550	38.94	25.64	2.80	37.06	30.32	54.00	-23.68	VERTICAL	Average
2	1653.550	45.99	25.64	2.80	37.06	37.37	74.00	-36.63	VERTICAL	Peak
3	3526.134	35.66	28.94	4.38	36.45	32.53	54.00	-21.47	VERTICAL	Average
4	3526.134	44.73	28.94	4.38	36.45	41.60	74.00	-32.40	VERTICAL	Peak
5	4884.490	35.88	31.56	5.52	36.50	36.46	54.00	-17.54	VERTICAL	Average
6	4884.490	44.15	31.56	5.52	36.50	44.73	74.00	-29.27	VERTICAL	Peak
7	7326.349	36.98	36.00	6.13	36.76	42.35	54.00	-11.65	VERTICAL	Average
8	7326.349	44.24	36.00	6.13	36.76	49.61	74.00	-24.39	VERTICAL	Peak
9	9764.312	35.87	38.50	7.02	36.33	45.06	54.00	-8.94	VERTICAL	Average
10	9764.312	43.75	38.50	7.02	36.33	52.94	74.00	-21.06	VERTICAL	Peak
11	12210.950	35.75	38.74	8.08	36.30	46.27	54.00	-7.73	VERTICAL	Average
12	12210.950	43.25	38.74	8.08	36.30	53.77	74.00	-20.23	VERTICAL	Peak



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



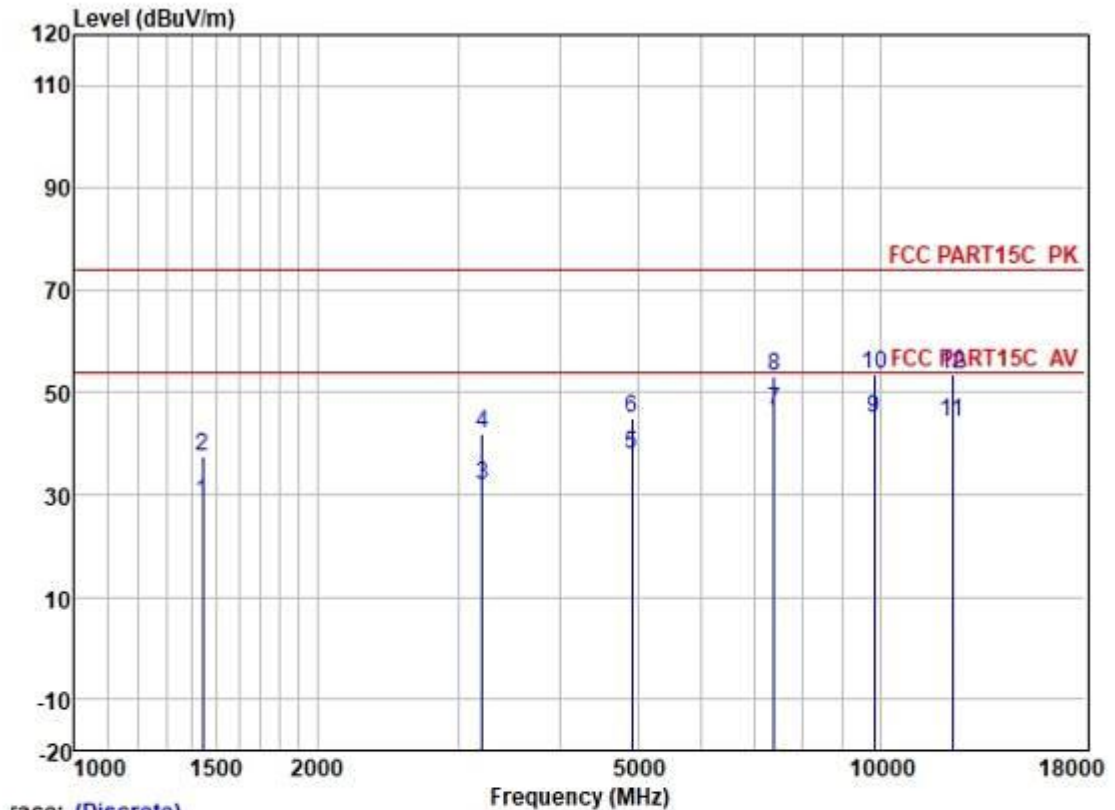
Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit	Over	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1339.006	40.37	25.29	2.60	37.28	30.98	54.00	-23.02	HORIZONTAL	Average
2	1339.006	46.71	25.29	2.60	37.28	37.32	74.00	-36.68	HORIZONTAL	Peak
3	3556.843	36.95	28.98	4.44	36.45	33.92	54.00	-20.08	HORIZONTAL	Average
4	3556.843	45.19	28.98	4.44	36.45	42.16	74.00	-31.84	HORIZONTAL	Peak
5	4924.993	34.78	31.62	5.60	36.50	35.50	54.00	-18.50	HORIZONTAL	Average
6	4924.993	44.50	31.62	5.60	36.50	45.22	74.00	-28.78	HORIZONTAL	Peak
7	7386.741	35.17	36.17	6.19	36.77	40.76	54.00	-13.24	HORIZONTAL	Average
8	7386.741	45.46	36.17	6.19	36.77	51.05	74.00	-22.95	HORIZONTAL	Peak
9	9848.018	36.16	38.58	6.99	36.32	45.41	54.00	-8.59	HORIZONTAL	Average
10	9848.018	44.49	38.58	6.99	36.32	53.74	74.00	-20.26	HORIZONTAL	Peak
11	12310.620	34.87	38.63	8.01	36.23	45.28	54.00	-8.72	HORIZONTAL	Average
12	12310.620	43.57	38.63	8.01	36.23	53.98	74.00	-20.02	HORIZONTAL	Peak



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



Trace: (Discrete)

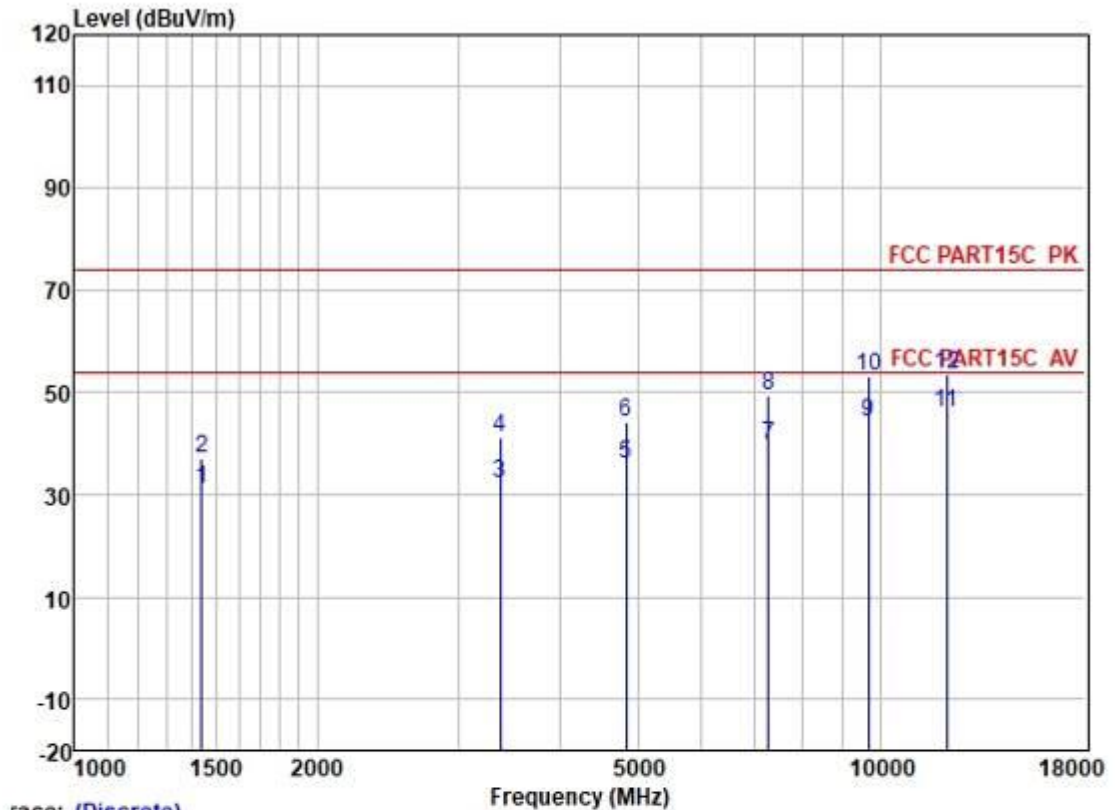
	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1443.509	37.50	25.44	2.69	37.16	28.47	54.00	-25.53	VERTICAL	Average
2	1443.509	46.52	25.44	2.69	37.16	37.49	74.00	-36.51	VERTICAL	Peak
3	3205.345	35.88	28.60	4.00	36.51	31.97	54.00	-22.03	VERTICAL	Average
4	3205.345	45.87	28.60	4.00	36.51	41.96	74.00	-32.04	VERTICAL	Peak
5	4924.999	36.99	31.62	5.60	36.50	37.71	54.00	-16.29	VERTICAL	Average
6	4924.999	44.18	31.62	5.60	36.50	44.90	74.00	-29.10	VERTICAL	Peak
7	7386.741	40.87	36.17	6.19	36.77	46.46	54.00	-7.54	VERTICAL	Average
8	7386.741	47.61	36.17	6.19	36.77	53.20	74.00	-20.80	VERTICAL	Peak
9	9848.925	35.64	38.58	6.99	36.32	44.89	54.00	-9.11	VERTICAL	Average
10	9848.925	44.27	38.58	6.99	36.32	53.52	74.00	-20.48	VERTICAL	Peak
11	12310.220	33.87	38.63	8.01	36.23	44.28	54.00	-9.72	VERTICAL	Average
12	12310.220	43.16	38.63	8.01	36.23	53.57	74.00	-20.43	VERTICAL	Peak



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



Trace: (Discrete)

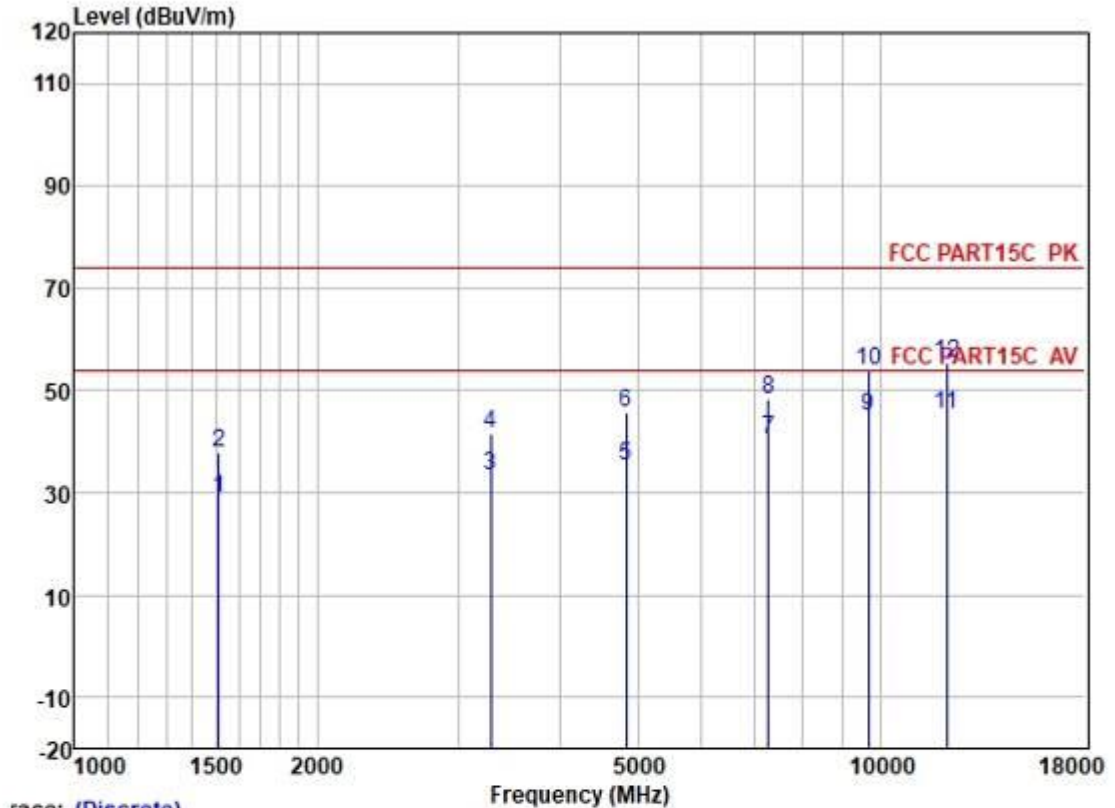
	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1439.343	40.28	25.44	2.68	37.16	31.24	54.00	-22.76	HORIZONTAL	Average
2	1439.343	46.29	25.44	2.68	37.16	37.25	74.00	-36.75	HORIZONTAL	Peak
3	3376.523	35.67	28.83	4.09	36.47	32.12	54.00	-21.88	HORIZONTAL	Average
4	3376.523	44.77	28.83	4.09	36.47	41.22	74.00	-32.78	HORIZONTAL	Peak
5	4844.993	35.58	31.50	5.45	36.48	36.05	54.00	-17.95	HORIZONTAL	Average
6	4844.993	43.88	31.50	5.45	36.48	44.35	74.00	-29.65	HORIZONTAL	Peak
7	7266.888	34.76	35.78	6.06	36.75	39.85	54.00	-14.15	HORIZONTAL	Average
8	7266.888	44.22	35.78	6.06	36.75	49.31	74.00	-24.69	HORIZONTAL	Peak
9	9688.349	34.96	38.44	7.04	36.34	44.10	54.00	-9.90	HORIZONTAL	Average
10	9688.349	43.87	38.44	7.04	36.34	53.01	74.00	-20.99	HORIZONTAL	Peak
11	12110.710	35.47	38.83	8.14	36.34	46.10	54.00	-7.90	HORIZONTAL	Average
12	12110.710	42.93	38.83	8.14	36.34	53.56	74.00	-20.44	HORIZONTAL	Peak



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



Trace: (Discrete)

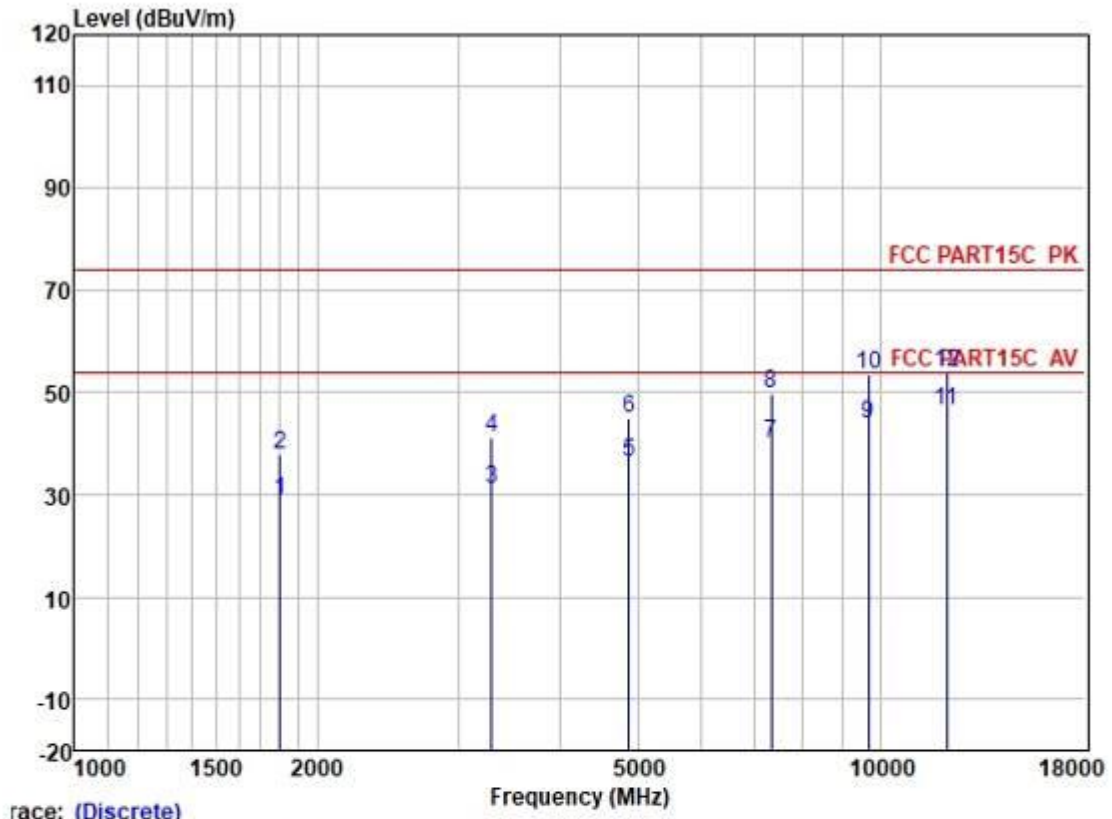
	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1511.833	37.58	25.51	2.80	37.11	28.78	54.00	-25.22	VERTICAL	Average
2	1511.833	46.84	25.51	2.80	37.11	38.04	74.00	-35.96	VERTICAL	Peak
3	3289.821	36.98	28.74	4.05	36.49	33.28	54.00	-20.72	VERTICAL	Average
4	3289.821	45.24	28.74	4.05	36.49	41.54	74.00	-32.46	VERTICAL	Peak
5	4844.887	34.71	31.50	5.45	36.48	35.18	54.00	-18.82	VERTICAL	Average
6	4844.887	45.33	31.50	5.45	36.48	45.80	74.00	-28.20	VERTICAL	Peak
7	7266.092	35.46	35.78	6.06	36.75	40.55	54.00	-13.45	VERTICAL	Average
8	7266.092	43.41	35.78	6.06	36.75	48.50	74.00	-25.50	VERTICAL	Peak
9	9688.497	35.85	38.44	7.04	36.34	44.99	54.00	-9.01	VERTICAL	Average
10	9688.497	44.74	38.44	7.04	36.34	53.88	74.00	-20.12	VERTICAL	Peak
11	12110.420	34.77	38.83	8.14	36.36	45.38	54.00	-8.62	VERTICAL	Average
12	12110.420	44.70	38.83	8.14	36.36	55.31	74.00	-18.69	VERTICAL	Peak



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



Trace: (Discrete)

	Freq	Read Level	Antenna Factor	Cable Loss	Preamp Factor	Level	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	dBuV/m	dBuV/m	dB		
1	1798.127	36.98	25.94	3.00	37.03	28.89	54.00	-25.11	HORIZONTAL	Average
2	1798.127	46.11	25.94	3.00	37.03	38.02	74.00	-35.98	HORIZONTAL	Peak
3	3299.344	34.85	28.75	4.06	36.49	31.17	54.00	-22.83	HORIZONTAL	Average
4	3299.344	44.81	28.75	4.06	36.49	41.13	74.00	-32.87	HORIZONTAL	Peak
5	4884.043	35.69	31.56	5.52	36.50	36.27	54.00	-17.73	HORIZONTAL	Average
6	4884.043	44.44	31.56	5.52	36.50	45.02	74.00	-28.98	HORIZONTAL	Peak
7	7326.518	34.86	36.00	6.13	36.76	40.23	54.00	-13.77	HORIZONTAL	Average
8	7326.518	44.29	36.00	6.13	36.76	49.66	74.00	-24.34	HORIZONTAL	Peak
9	9688.916	34.68	38.44	7.04	36.34	43.82	54.00	-10.18	HORIZONTAL	Average
10	9688.916	44.31	38.44	7.04	36.34	53.45	74.00	-20.55	HORIZONTAL	Peak
11	12110.900	35.75	38.83	8.14	36.34	46.38	54.00	-7.62	HORIZONTAL	Average
12	12110.900	43.42	38.83	8.14	36.34	54.05	74.00	-19.95	HORIZONTAL	Peak



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