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

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TEST REPORT

Application No.:	SZEM1805004406CR
Applicant:	Seeed Technology Co., Ltd.
Address of Applicant:	1F, Tower B, Building 2, Shanshui Building, NanshanYungu Innovation Industry Park, Liuxian Ave, Shenzhen, China
Manufacturer:	Seeed Technology Co., Ltd.
Address of Manufacturer:	1F, Tower B, Building 2, Shanshui Building, NanshanYungu Innovation Industry Park, Liuxian Ave, Shenzhen, China
Factory:	Seeed Technology Co., Ltd.
Address of Factory:	1F, Tower B, Building 2, Shanshui Building, NanshanYungu Innovation Industry Park, Liuxian Ave, Shenzhen, China
Equipment Under Test (EUT):	
EUT Name:	Azure Sphere MT3620 Development Kit
Model No.:	Azure Sphere MT3620 Development Kit
Trade mark:	Seeedstudio
FCC ID:	Z4T-MT3620DEVB
Standard(s) :	47 CFR Part 15, Subpart E 15.407
Date of Receipt:	2018-05-25
Date of Test:	2018-06-01 to 2018-06-19
Date of Issue:	2018-06-20
Test Result:	**Pass***

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

Keny Xu
EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

Revision Record				
Version	**Chapter**	**Date**	**Modifier**	**Remark**
01		2018-06-20		Original

Authorized for issue by:				
				
		Harry Wu /Project Engineer		
				
		Eric Fu /Reviewer		

2 Test Summary

Radio Spectrum Technical Requirement				
Item	**Standard**	**Method**	**Requirement**	**Result**
Antenna Requirement	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.203	Pass
Transmission in the Absence of Data	47 CFR Part 15, Subpart E 15.407	N/A	47 CFR Part 15, Subpart C 15.407 (c)	Pass

N/A: Not applicable

Radio Spectrum Matter Part				
Item	**Standard**	**Method**	**Requirement**	**Result**
Conducted Emissions at AC Power Line (150kHz-30MHz)	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 6.2	47 CFR Part 15, Subpart C 15.207 & 15.407 b(6)	Pass
Duty Cycle	47 CFR Part 15, Subpart E 15.407	KDB 789033 II B 1	KDB 789033 D02 II B 1	Pass
99% Bandwidth	47 CFR Part 15, Subpart E 15.407	KDB 789033 II D	N/A	Pass
26dB Emission bandwidth	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II C 1	47 CFR Part 15, Subpart C 15.407 (a)	Pass
Minimum 6 dB bandwidth (5.725-5.85 GHz band)	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II C 2	47 CFR Part 15, Subpart C 15.407 (e)	Pass
Maximum Conducted output power	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II E	47 CFR Part 15, Subpart C 15.407 (a)	Pass
Peak Power spectrum density	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II F	47 CFR Part 15, Subpart C 15.407 (a)	Pass
DFS: Non-occupancy period	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
DFS: Channel Move Time	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
DFS: Channel Closing Transmission Time	47 CFR Part 15, Subpart E 15.407	KDB 905462 D02 Section 7.8.3	KDB 905462 D02 Section 5.1	Pass
Radiated Emissions	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
Radiated Emissions which fall in the restricted bands	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart C 15.209 & 15.407(b)	Pass
Frequency Stability	47 CFR Part 15, Subpart E 15.407	ANSI C63.10 (2013) Section 6.8	47 CFR Part 15, Subpart C 15.407 (g)	Pass

N/A: Not applicable

3 Contents

4 General Information

4.1 Details of E.U.T.

Power supply:	DC5V, 300mA or Powerd by Micro USB Port
Cable:	Micro USB Cable: 100cm, Shielded
Antenna Gain	Antenna1: 4.5dBi, Antenna2: 4.5dBi Two antennas can not synchronous transmission.
Antenna Type	Chip Antenna
DFS Function	Slave without Radar detection
TPC Function	Not Support

Operation Frequency:	Band	Mode	Frequency Range(MHz)	Number of channels
	Band 1	802.11a/n(HT20)	5180-5240	4
	Band 2A	802.11a/n(HT20	5260-5320	4
	Band 2C	802.11a/n(HT20)	5500-5700	11
	Band 3	802.11a/n(HT20)	5745-5825	5
Modulation Type:	802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) 802.11n: OFDM (BPSK, QPSK, 16QAM, 64QAM)			
Channel Spacing:	802.11a/n(HT20): 20MHz			

Channel list for 802.11a/n(HT20)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180MHz	40	5200MHz	44	5220MHz	48	5240MHz
52	5260MHz	56	5280MHz	60	5330MHz	64	5320MHz
100	5500 MHz	104	5520 MHz	108	5540 MHz	112	5560 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680MHz	140	5700 MHz	149	5745MHz
153	5765MHz	157	5785MHz	161	5805MHz	165	5825MHz

Selected Test Channel for 802.11a/n(HT20)		
Band	Channel	Frequency
U-NII Band I	The lowest channel (CH36)	5180MHz
	The middle channel (CH40)	5200MHz
	The highest channel (CH48)	5240MHz
U-NII Band 2A	The lowest channel (CH52)	5260MHz
	The middle channel (CH60)	5785MHz
	The highest channel (CH64)	5320MHz
U-NII Band 2C	The lowest channel (CH100)	5500MHz
	The middle channel (CH116)	5580MHz
	The highest channel (CH140)	5700MHz
U-NII Band III	The lowest channel (CH149)	5745MHz
	The middle channel (CH157)	5785MHz
	The highest channel (CH165)	5825MHz

4.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Adapter	Apple	A1357 W010A051	REF. No.SEA0500

4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	± 7.25 x 10^{-8}
2	Duty cycle	± 0.37%
3	Occupied Bandwidth	± 3%
4	RF conducted power	± 0.75dB
5	RF power density	± 2.84dB
6	Conducted Spurious emissions	± 0.75dB
7	RF Radiated power	± 4.5dB (below 1GHz)
		± 4.8dB (above 1GHz)
8	Radiated Spurious emission test	± 4.5dB (Below 1GHz)
		± 4.8dB (Above 1GHz)
9	Temperature test	± 1℃
10	Humidity test	± 3%
11	Supply voltages	± 1.5%
12	Time	± 3%

Remark:
The Ulab (lab Uncertainty) is less than Ucispr (CISPR Uncertainty), so the test results
- compliance is deemed to occur if no measured disturbance level exceeds the disturbance limit;
- non-compliance is deemed to occur if any measured disturbance level exceeds the disturbance limit.

4.4 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.

4.5 Test Facility

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

• CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC

Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• 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.

• Industry Canada (IC)

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

4.6 Deviation from Standards

None

4.7 Abnormalities from Standard Conditions

None

5 Equipment List

Conducted Emissions at AC Power Line (150kHz-30MHz)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Shielding Room	ZhongYu Electron	GB-88	SEM001-06	2017-05-10	2020-05-09
Measurement Software	AUDIX	e3 V5.4.1221d	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM024-01	2017-07-13	2018-07-12
LISN	Rohde & Schwarz	ENV216	SEM007-01	2017-09-27	2018-09-26
LISN	ETS-LINDGREN	3816/2	SEM007-02	2018-04-02	2019-04-01
EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-02	2018-04-02	2019-04-01

Duty Cycle					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2017-07-13	2018-07-12
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26

99% Bandwidth					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2017-07-13	2018-07-12
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26

26dB Emission bandwidth					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2017-07-13	2018-07-12
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26

Minimum 6 dB bandwidth (5.725-5.85 GHz band)					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2017-07-13	2018-07-12
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26

Maximum Conducted output power					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2017-07-13	2018-07-12
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26

Peak Power spectrum density					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2017-07-13	2018-07-12
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26

Radiated Emissions					
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
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2017-07-13	2018-07-12
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Horn Antenna(15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16
Pre-amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2017-09-27	2018-09-26
Low Noise Amplifier(100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2017-09-27	2018-09-27
Pre-amplifier(18-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2018-04-02	2019-04-01
Pre-amplifier(26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2018-04-02	2019-04-01
DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21
Band filter	N/A	N/A	SEM023-01	N/A	N/A

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
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2017-07-13	2018-07-12
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2018-04-02	2019-04-01
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Horn Antenna(15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16
Pre-amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2017-09-27	2018-09-26
Low Noise Amplifier(100MHz-18GHz)	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2017-09-27	2018-09-27

Pre-amplifier(18-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2018-04-02	2019-04-01
Pre-amplifier(26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2018-04-02	2019-04-01
DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21
Band filter	N/A	N/A	SEM023-01	N/A	N/A

General used equipment					
Equipment	**Manufacturer**	**Model No**	**Inventory No**	**Cal Date**	**Cal Due Date**
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2017-09-29	2018-09-28
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2017-09-29	2018-09-28
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2017-09-29	2018-09-28
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2018-04-08	2019-04-07

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

47 CFR Part 15, Subpart C 15.203

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 antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit permanently attached antenna or of an so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

EUT Antenna:

Antenna location: Refer to Appendix(Internal photos)

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna 1 is 4.5dBi and antenna 2 is 4.5dBi.

Pretest the EUT at antenna 1 and antenna 2 and found the antenna 1 which is worst case, So, Only the antenna 1 test data is recorded in the report.

6.2 Transmission in the Absence of Data

6.2.1 Test Requirement:

47 CFR Part 15, Subpart C 15.407 (c)

6.2.2 Conclusion

Standard Requirement:

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude the transmission of control or signalling information or the use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

Applicants shall include in their application for equipment authorization a description of how this requirement is met.

EUT Details:

WIFI chip support automatically discontinue transmission in case of either absence of information to transmit or operational failure, if the chip detect absence of information to transmit or operational failure, it will be automatically shut off.

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 & 15.407 b(6)

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.		

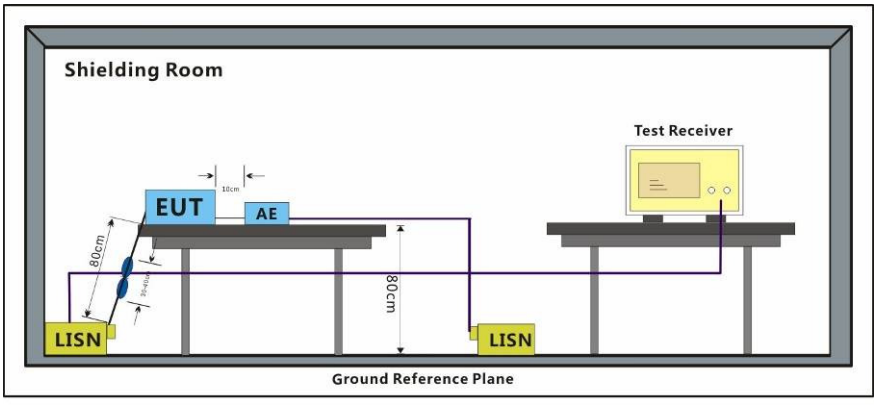
7.1.1 E.U.T. Operation

Operating Environment:

Temperature: 21.7 °C Humidity: 44.2 % RH Atmospheric Pressure: 1015 mbar

Pretest these modes to find the worst case:	c:TX mode (Band 1)_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 @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report. d:TX mode (Band 2A)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report. e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report. f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.
The worst case for final test:	c:TX mode (Band 1)_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 @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case 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.

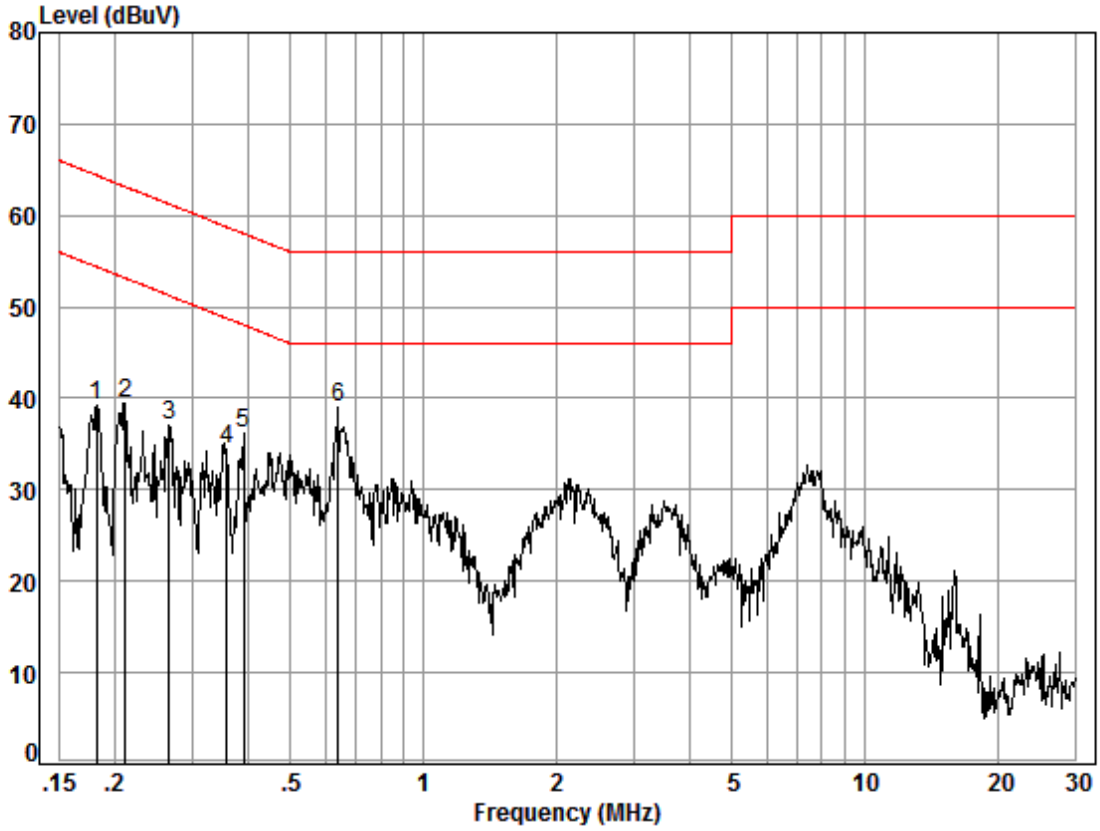
3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,

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

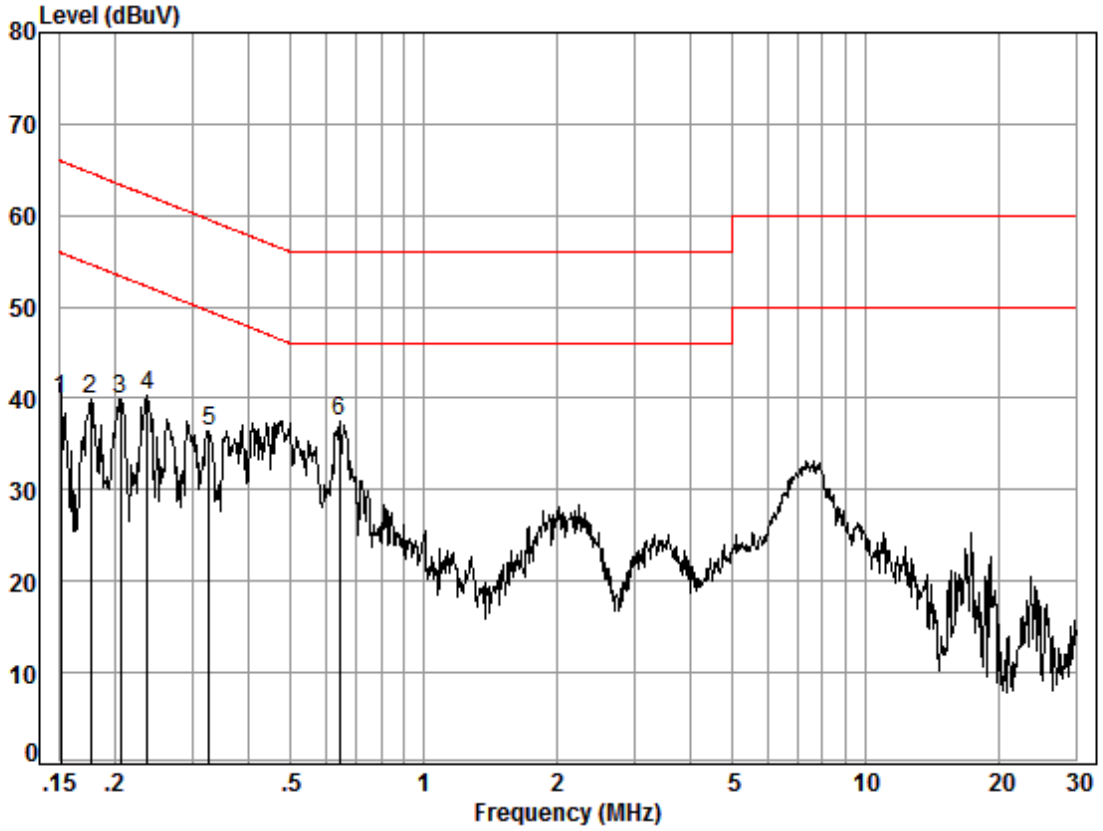
Mode:c; Line:Live Line



Site : Shielding Room
Condition: Line
Job No. : 04406CR
Mode : c

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.18	0.03	9.51	29.80	39.34	54.42	-15.08	Peak
2	0.21	0.03	9.50	29.93	39.46	53.14	-13.68	Peak
3	0.27	0.03	9.51	27.54	37.08	51.25	-14.17	Peak
4	0.36	0.03	9.50	24.99	34.52	48.74	-14.22	Peak
5	0.39	0.04	9.49	26.72	36.25	48.03	-11.78	Peak
6	0.64	0.06	9.51	29.48	39.05	46.00	-6.95	Peak

Mode:c; Line:Neutral Line



Site : Shielding Room
Condition: Neutral
Job No. : 04406CR
Mode : c

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15	0.02	9.58	30.31	39.91	55.96	-16.05	Peak
2	0.18	0.03	9.59	30.23	39.85	54.68	-14.83	Peak
3	0.21	0.03	9.57	30.37	39.97	53.36	-13.39	Peak
4	0.24	0.03	9.58	30.68	40.29	52.22	-11.93	Peak
5	0.33	0.03	9.58	26.83	36.44	49.53	-13.09	Peak
6	0.64	0.06	9.62	27.90	37.58	46.00	-8.42	Peak

7.2 Duty Cycle

Test Requirement KDB 789033 D02 II B 1

Test Method: KDB 789033 II B 1

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C Humidity: 53.1 % RH Atmospheric Pressure: 1010 mbar

Test mode

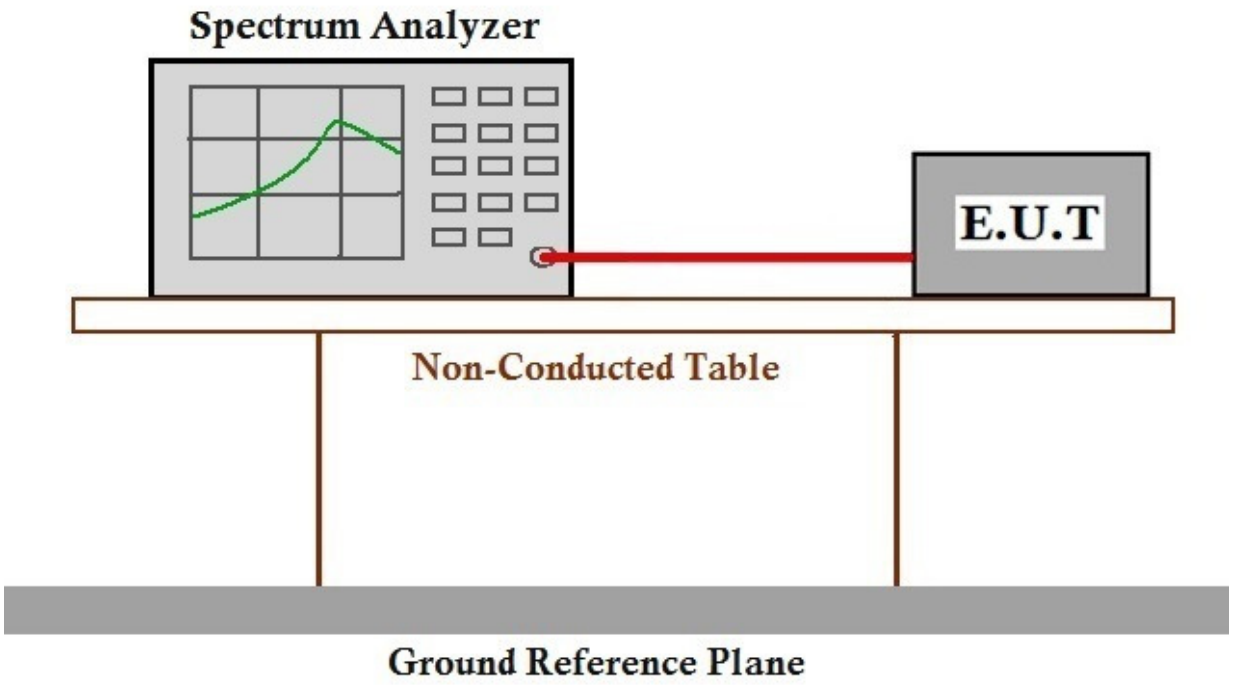
c:TX mode (Band 1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

d:TX mode (Band 2A)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). 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 15.407

7.3 99% Bandwidth

Test Requirement N/A

Test Method: KDB 789033 II D

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C Humidity: 53.1 % RH Atmospheric Pressure: 1010 mbar

Test mode

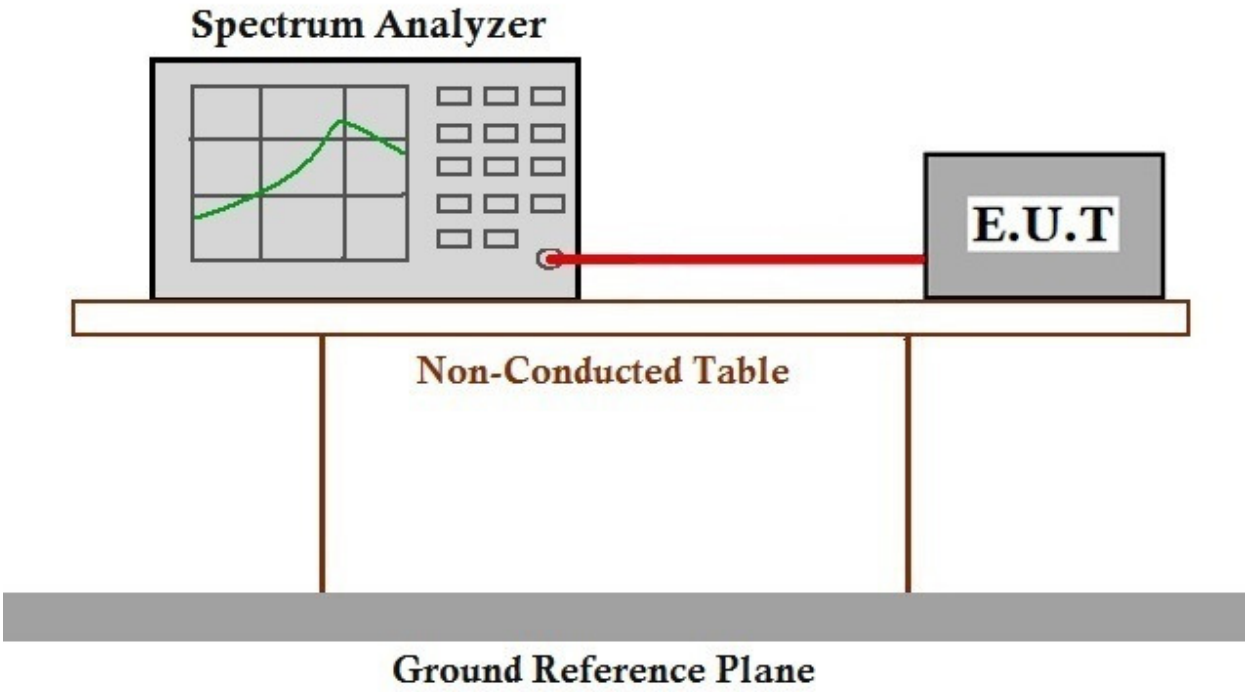
c:TX mode (Band 1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

d:TX mode (Band 2A)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). 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 15.407

7.4 26dB Emission bandwidth

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II C 1

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C Humidity: 53.1 % RH Atmospheric Pressure: 1010 mbar

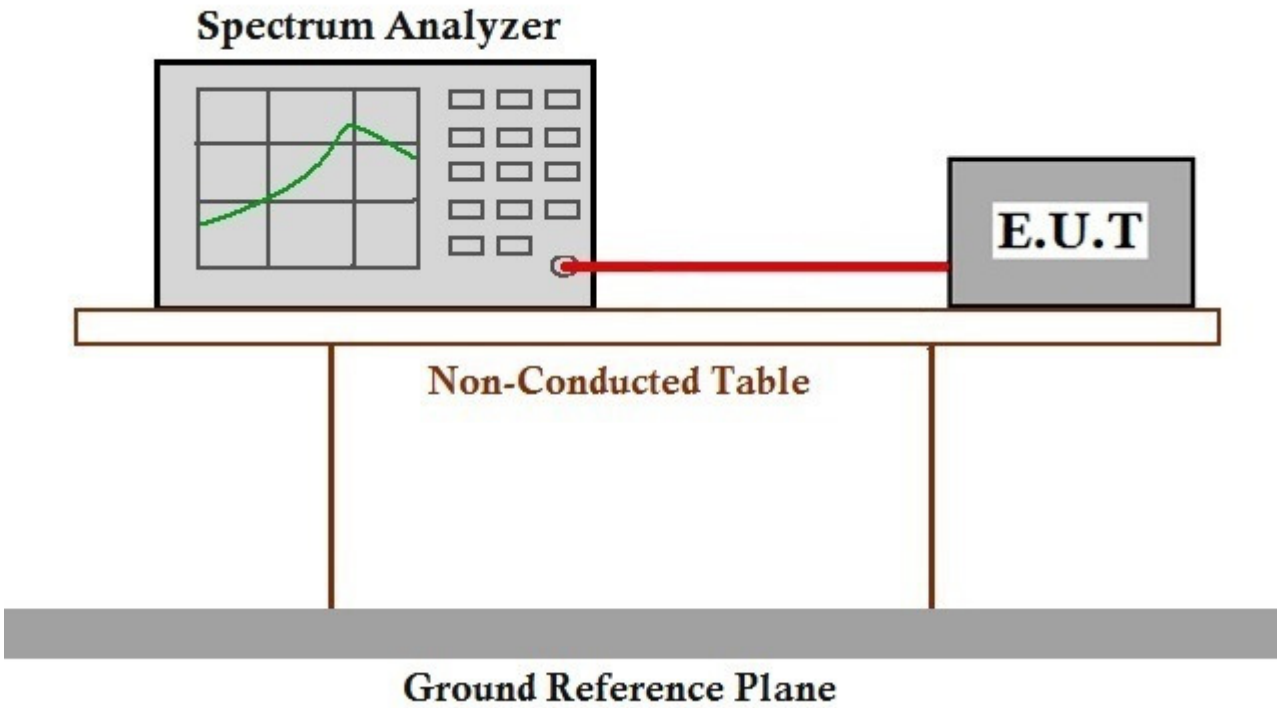
Pretest these modes to find the worst case:

d:TX mode (Band 2A)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). 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 15.407

7.5 Minimum 6 dB bandwidth (5.725-5.85 GHz band)

Test Requirement 47 CFR Part 15, Subpart C 15.407 (e)
Test Method: KDB 789033 D02 II C 2
Limit: ≥500 kHz

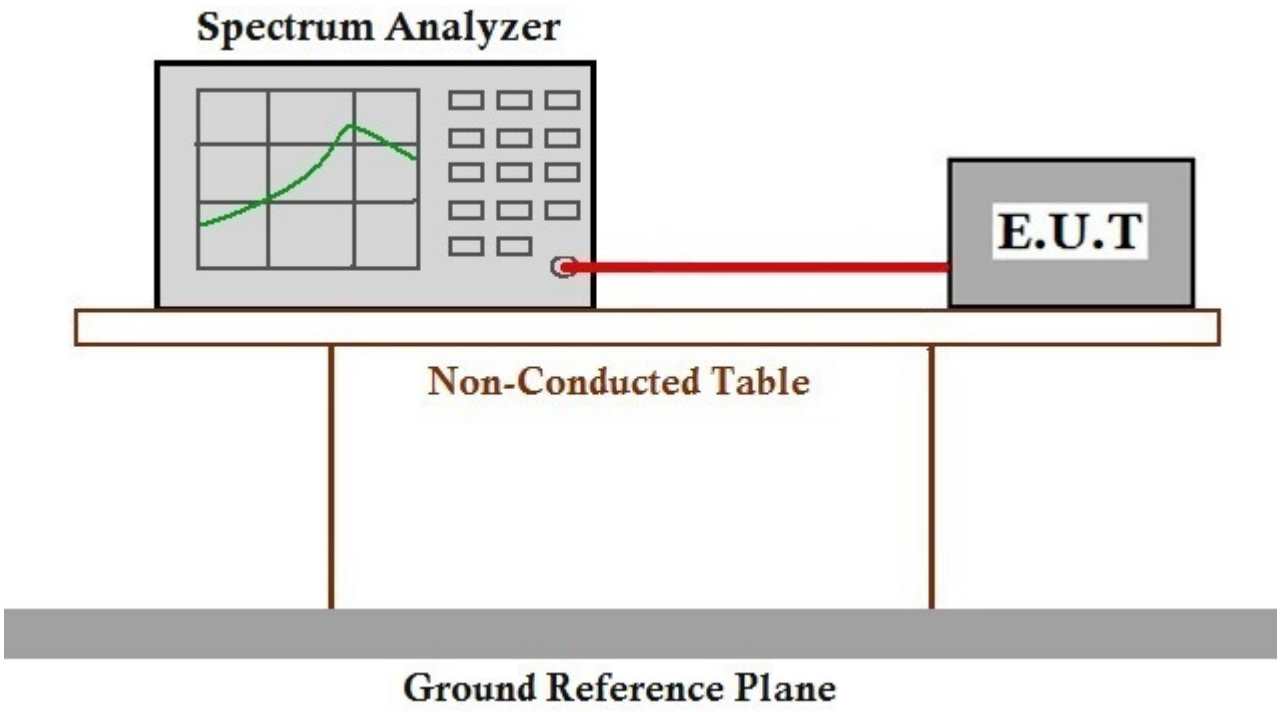
7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C Humidity: 53.1 % RH Atmospheric Pressure: 1010 mbar

Test mode f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). 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 15.407

7.6 Maximum Conducted output power

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II E

Limit:

Frequency band(MHz)	Limit
5150-5250	≤1W(30dBm) for master device
	≤250mW(24dBm) for client device
5250-5350	≤250mW(24dBm) for client device or 11dBm+10logB*
5470-5725	≤250mW(24dBm) for client device or 11dBm+10logB*
5725-5850	≤1W(30dBm)
Remark:	* Where B is the 26dB emission bandwidth in MHz. The maximum conducted output power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms-equivalent voltage.

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C Humidity: 53.1 % RH Atmospheric Pressure: 1010 mbar

Pretest these modes to find the worst case:

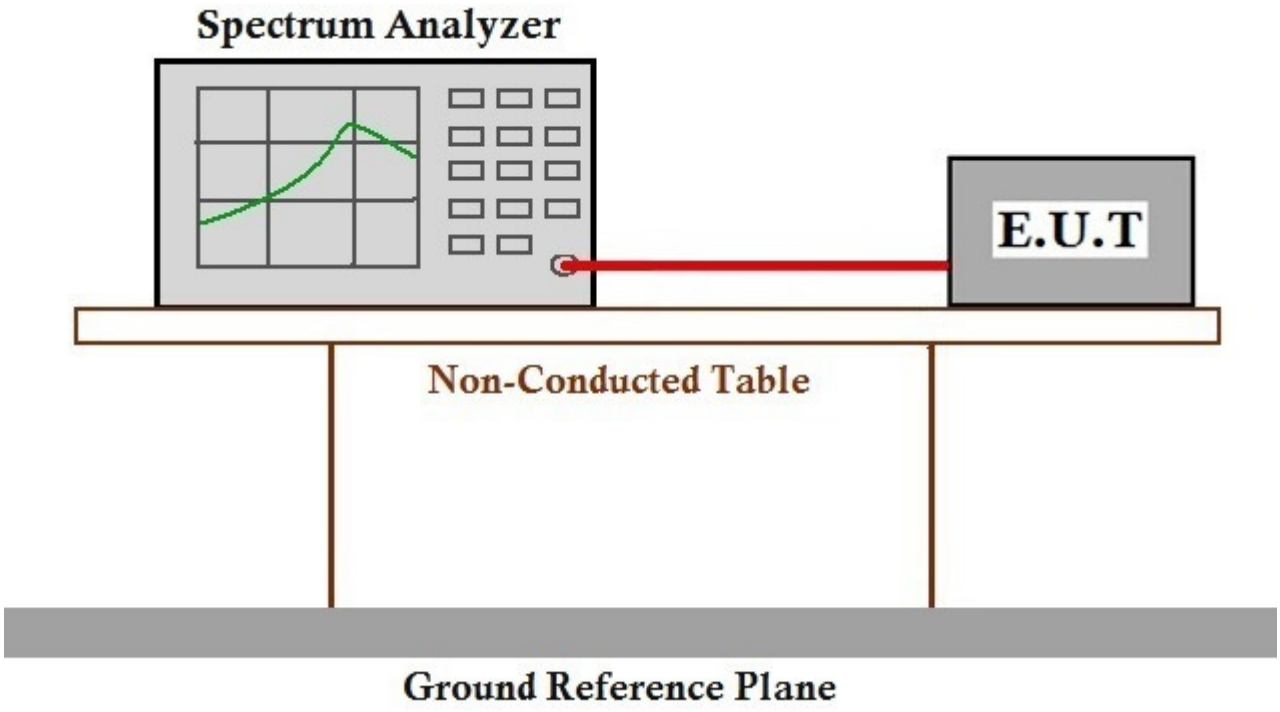
c:TX mode (Band 1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

d:TX mode (Band 2A)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). 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 15.407

7.7 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart C 15.407 (a)

Test Method: KDB 789033 D02 II F

Limit:

Frequency band(MHz)	Limit
5150-5250	≤17dBm in 1MHz for master device
	≤11dBm in 1MHz for client device
5250-5350	≤11dBm in 1MHz for client device
5470-5725	≤11dBm in 1MHz for client device
5725-5850	≤30dBm in 500 kHz
Remark:	The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test.

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 23.9 °C Humidity: 53.1 % RH Atmospheric Pressure: 1010 mbar

Pretest these modes to find the worst case:

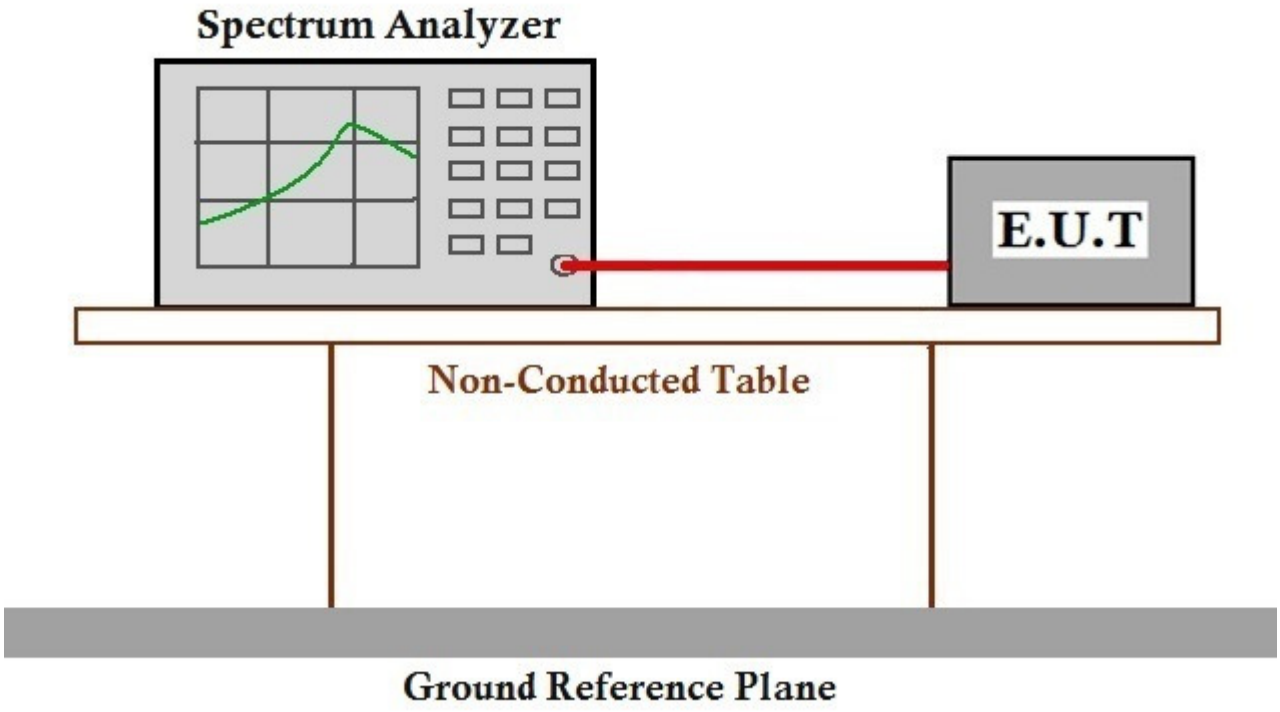
c:TX mode (Band 1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

d:TX mode (Band 2A)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

7.7.2 Test Setup Diagram



7.7.3 Measurement Procedure and Data

The detailed test data see: Appendix 15.407

7.8 DFS: Non-occupancy period

Test Requirement KDB 905462 D02 Section 5.1
Test Method: KDB 905462 D02 Section 7.8.3
Limit: Minimum 30 minutes

7.8.1 E.U.T. Operation

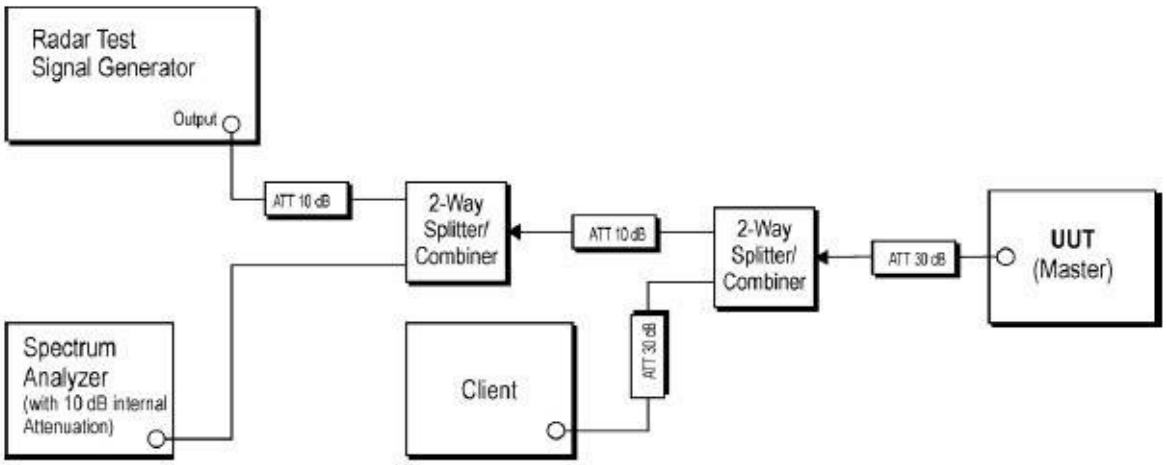
Operating Environment:

Temperature: 23.9 °C Humidity: 41 % RH Atmospheric Pressure: 1010 mbar

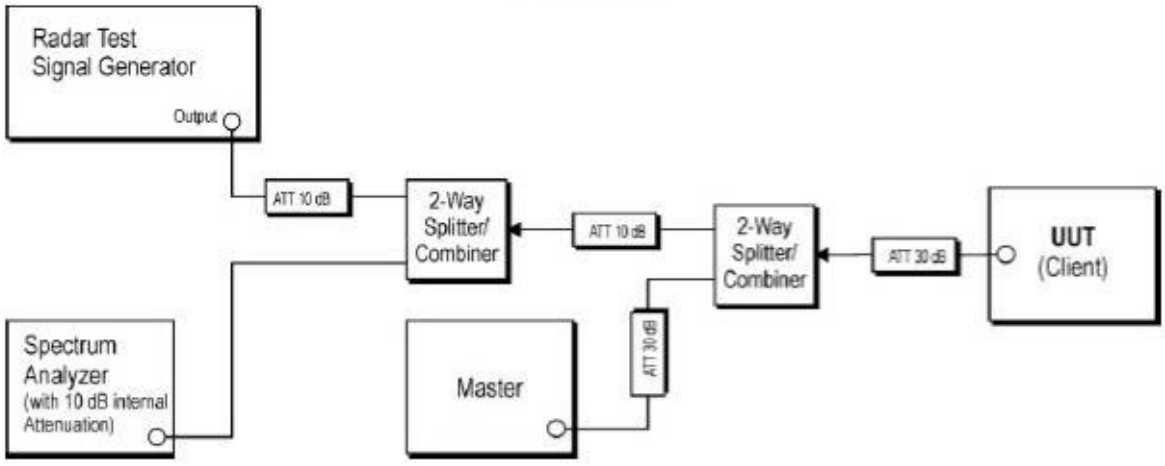
Test mode d:TX mode (Band 2A)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

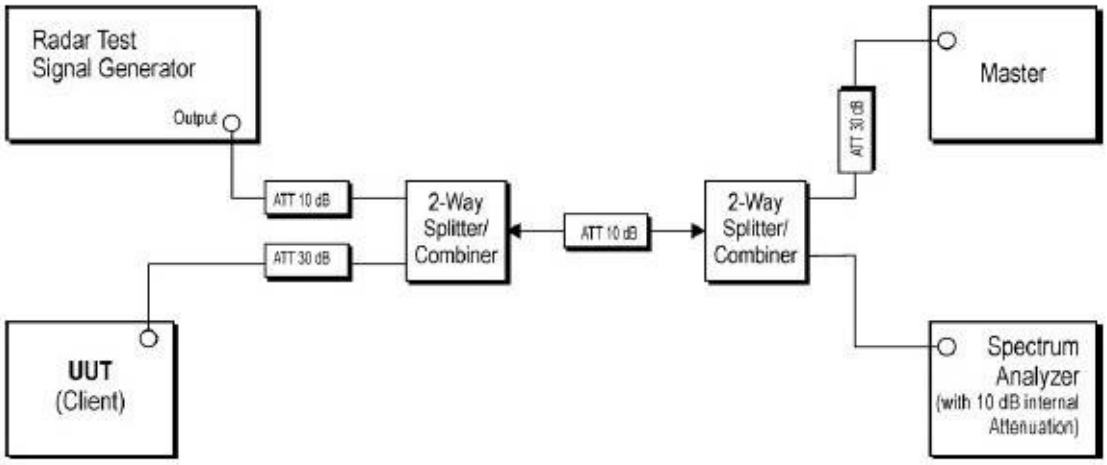
7.8.2 Test Setup Diagram



DFS master



DFS slave with radar detection



DFS slave without radar detection

7.8.3 Measurement Procedure and Data

1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.

2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.

3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.

4) EUT will associate with the master at channel. The file “iperf.exe” specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.

5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.

6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.

7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

The detailed test data see: Appendix 15.407

7.9 DFS: Channel Move Time

Test Requirement KDB 905462 D02 Section 5.1

Test Method: KDB 905462 D02 Section 7.8.3

Limit: 10 seconds(should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst)

7.9.1 E.U.T. Operation

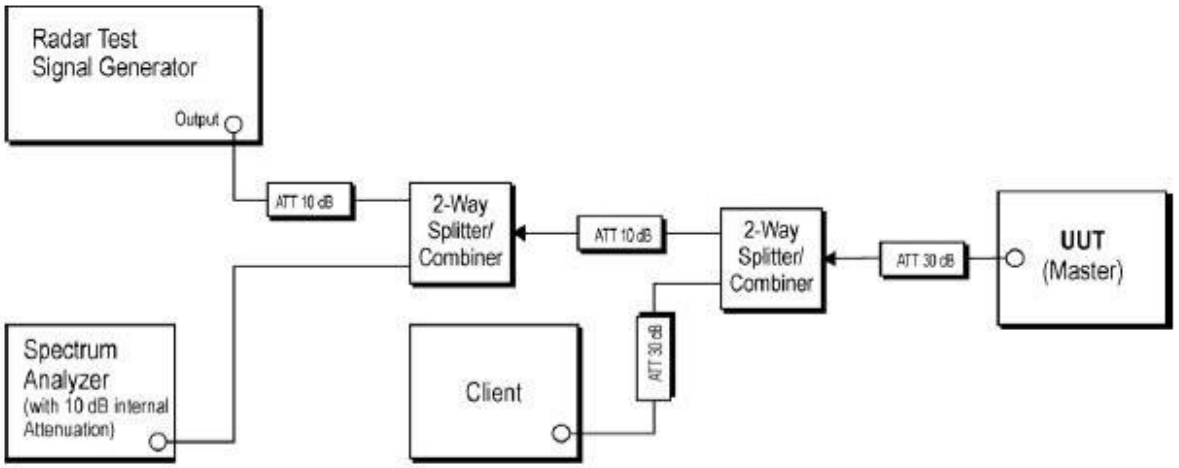
Operating Environment:

Temperature: 23.9 °C Humidity: 41 % RH Atmospheric Pressure: 1010 mbar

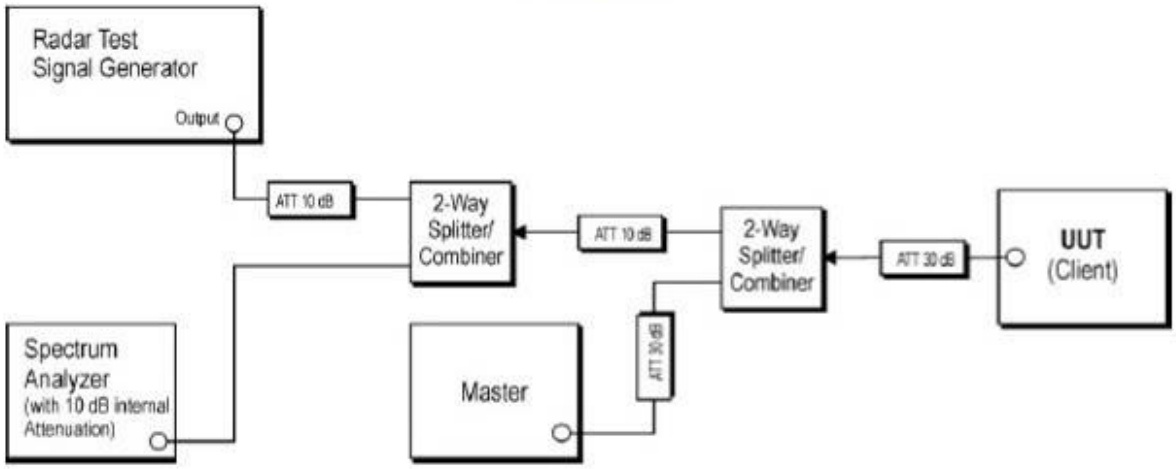
Test mode: d:TX mode (Band 2A)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

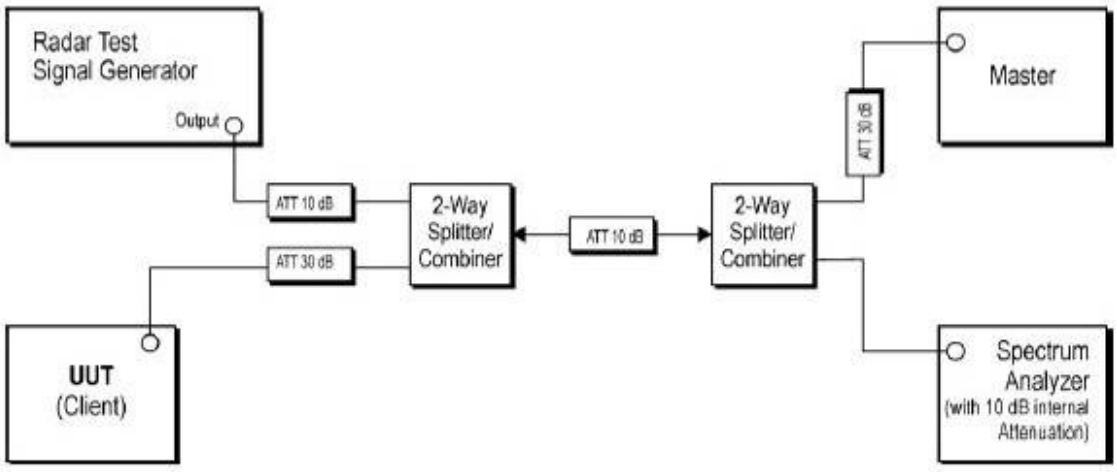
7.9.2 Test Setup Diagram



DFS master



DFS slave with radar detection



DFS slave without radar detection

7.9.3 Measurement Procedure and Data

1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.

2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.

3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.

4) EUT will associate with the master at channel. The file “iperf.exe” specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.

5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.

6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.

7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

The detailed test data see: Appendix 15.407

7.10 DFS: Channel Closing Transmission Time

Test Requirement KDB 905462 D02 Section 5.1

Test Method: KDB 905462 D02 Section 7.8.3

Limit: 200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period(should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst. It is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions)

7.10.1 E.U.T. Operation

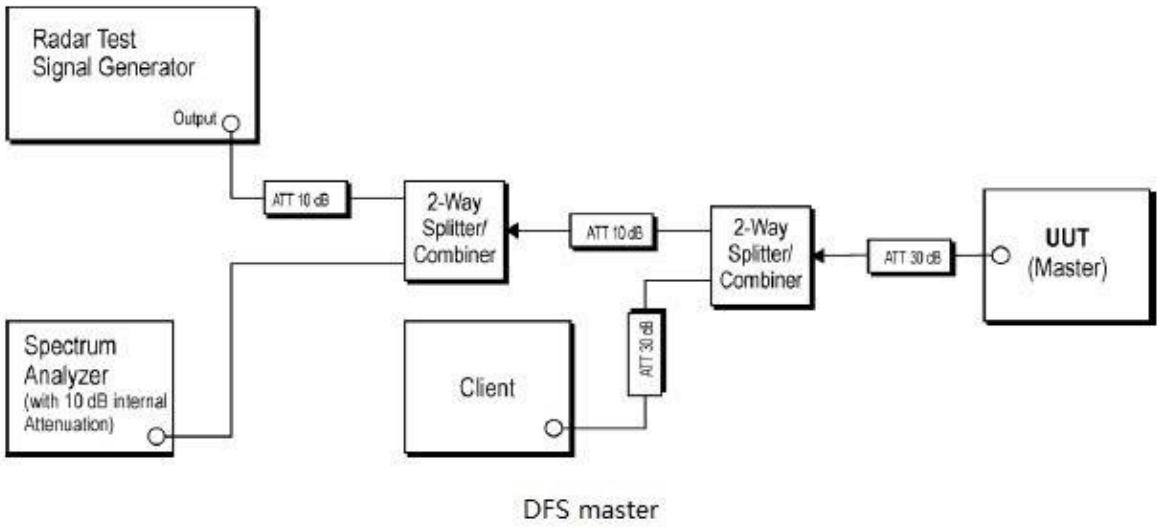
Operating Environment:

Temperature: 23.8 °C Humidity: 41.1 % RH Atmospheric Pressure: 1010 mbar

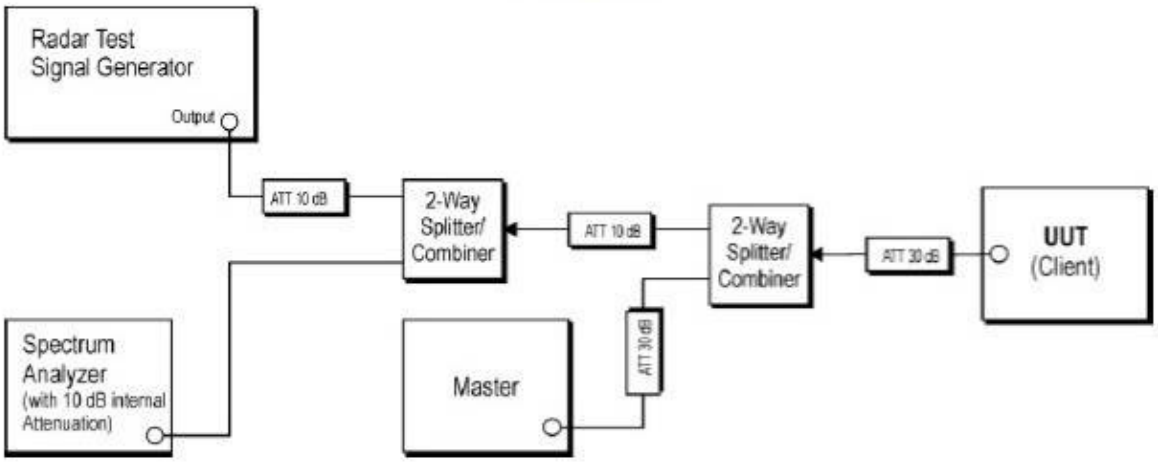
Test mode: d:TX mode (Band 2A)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

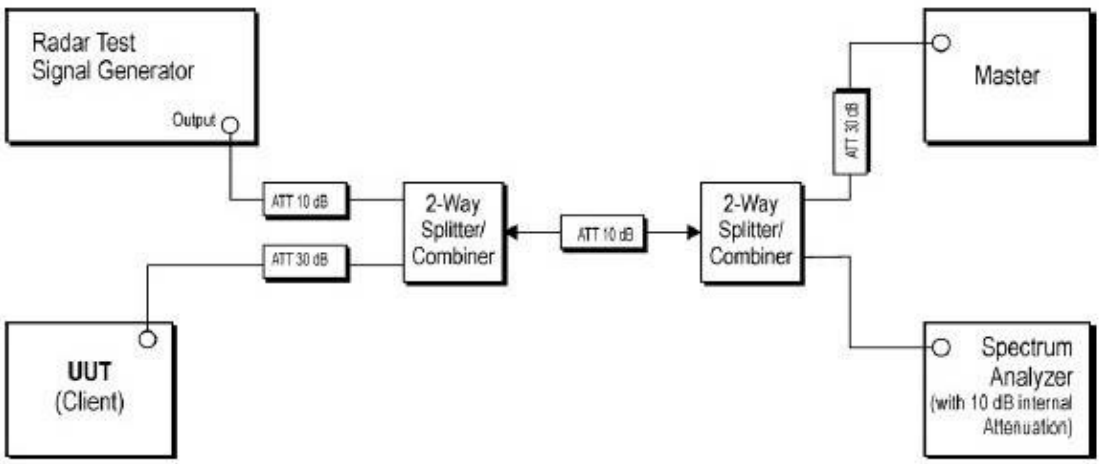
7.10.2 Test Setup Diagram



DFS master



DFS slave with radar detection



DFS slave without radar detection

7.10.3 Measurement Procedure and Data

1) The radar pulse generator is setup to provide a pulse at frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.

2) The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device.

3) A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.

4) EUT will associate with the master at channel. The file “iperf.exe” specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.

5) When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.

6) Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel. Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type.

7) Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by: Dwell (0.3ms) =S (12000ms) / B (4000); where Dwell is the dwell time per spectrum analyzer sampling bin, S is sweep time and B is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by: C (ms)= N X Dwell (0.3ms); where C is the Closing Time, N is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and Dwell is the dwell time per bin.

8) Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

The detailed test data see: Appendix 15.407

7.11 Radiated Emissions

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

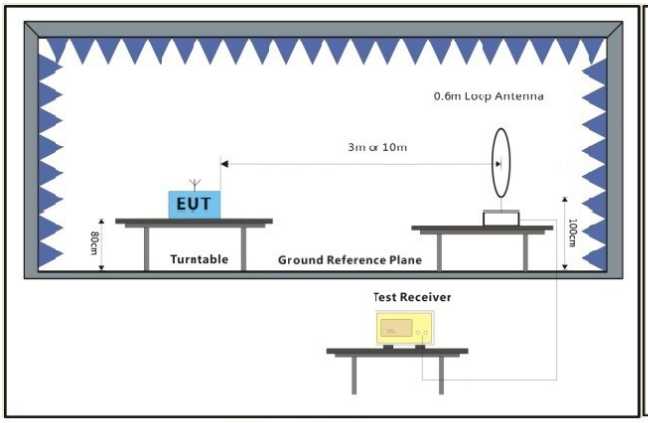
7.11.1 E.U.T. Operation

Operating Environment:

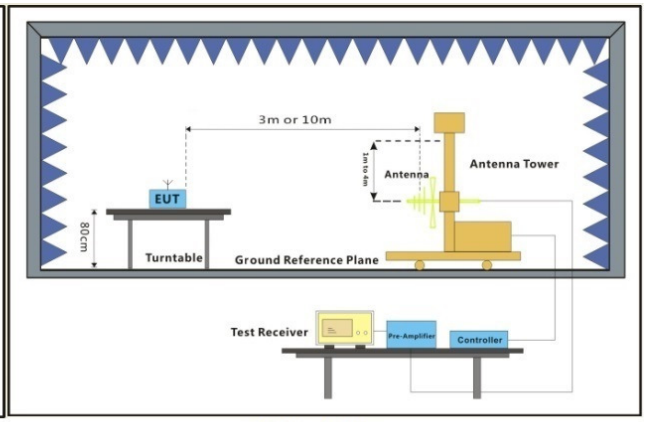
Temperature: 25.1 °C Humidity: 56 % RH Atmospheric Pressure: 1015 mbar

Pretest these modes to find the worst case:	c:TX mode (Band 1)_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 @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report. d:TX mode (Band 2A)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report. e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report. f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.
The worst case for final test:	c:TX mode (Band 1)_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 @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report. d:TX mode (Band 2A)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report. e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report. f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

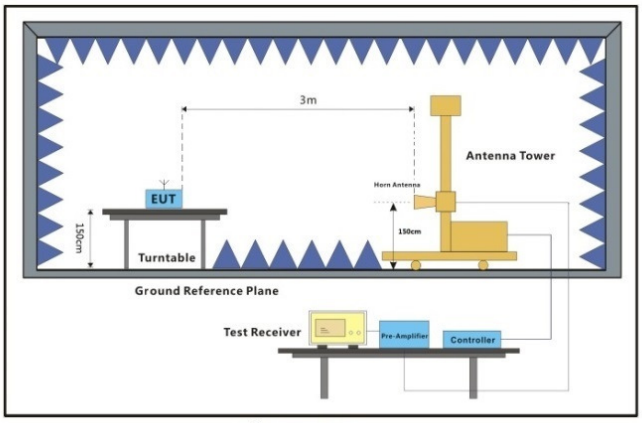
7.11.2 Test Setup Diagram



Below 30MHz



30MHz-1GHz



Above 1GHz

7.11.3 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

2. For emission below 1GHz, through the pre-scan found the worst case is the lowest channel of 802.11a. Only the worst case is recorded in the report.

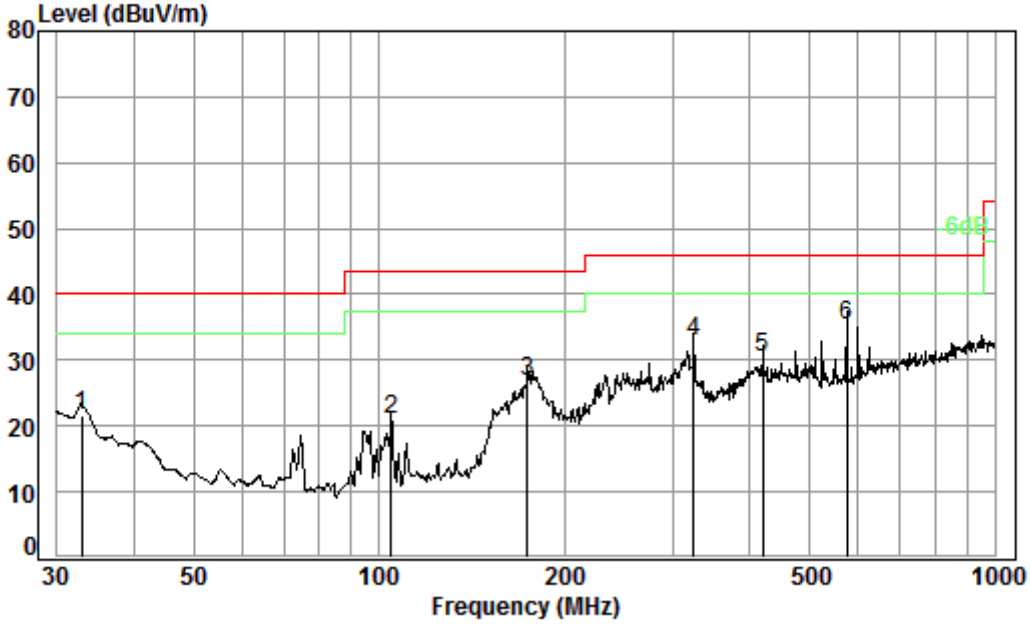
3. Scan from 9kHz to 40GHz, the disturbance above 18GHz and below 30MHz was very low. The points marked on above plots are the highest emissions could be found when testing, so only above points had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

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

30MHz~1GHz

QP value:

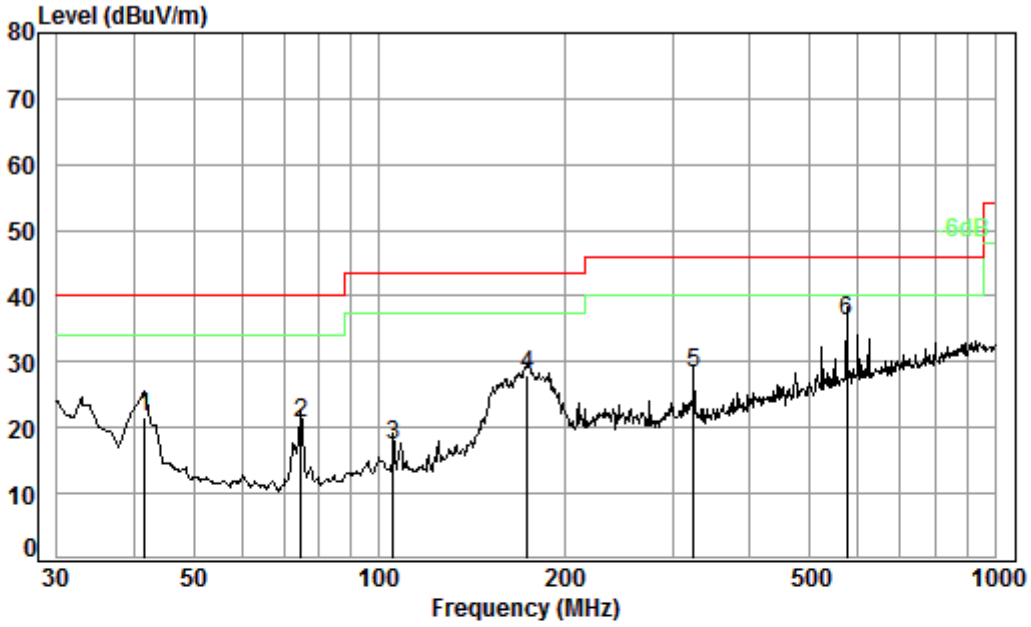
Mode:d; Polarization:Horizontal;



Condition: 3m HORIZONTAL
Job No. : 04406CR
Test mode: d

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	32.86	0.60	20.92	27.35	27.49	21.66	40.00	-18.34
2	104.54	1.21	13.78	27.17	33.13	20.95	43.50	-22.55
3	174.42	1.36	15.79	26.79	36.39	26.75	43.50	-16.75
4	324.46	1.98	20.36	26.58	37.20	32.96	46.00	-13.04
5	420.58	2.29	22.89	27.25	32.47	30.40	46.00	-15.60
6 pp	574.63	2.68	26.13	27.58	34.12	35.35	46.00	-10.65

Mode:d; Polarization:Vertical

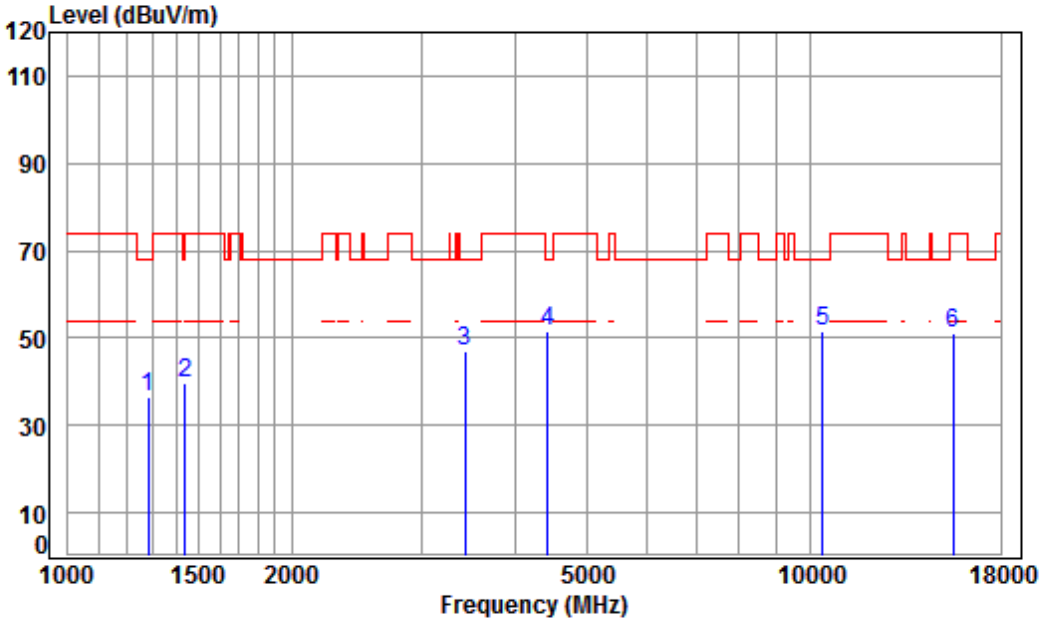


Condition: 3m VERTICAL
Job No. : 04406CR
Test mode: d

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	41.71	0.64	16.88	27.31	31.42	21.63	40.00	-18.37
2	74.66	0.94	12.41	27.24	34.54	20.65	40.00	-19.35
3	105.64	1.22	13.73	27.16	29.40	17.19	43.50	-26.31
4	174.42	1.36	15.79	26.79	37.51	27.87	43.50	-15.63
5	324.46	1.98	20.36	26.58	32.40	28.16	46.00	-17.84
6 pp	574.63	2.68	26.13	27.58	35.00	36.23	46.00	-9.77

Above 1GHz

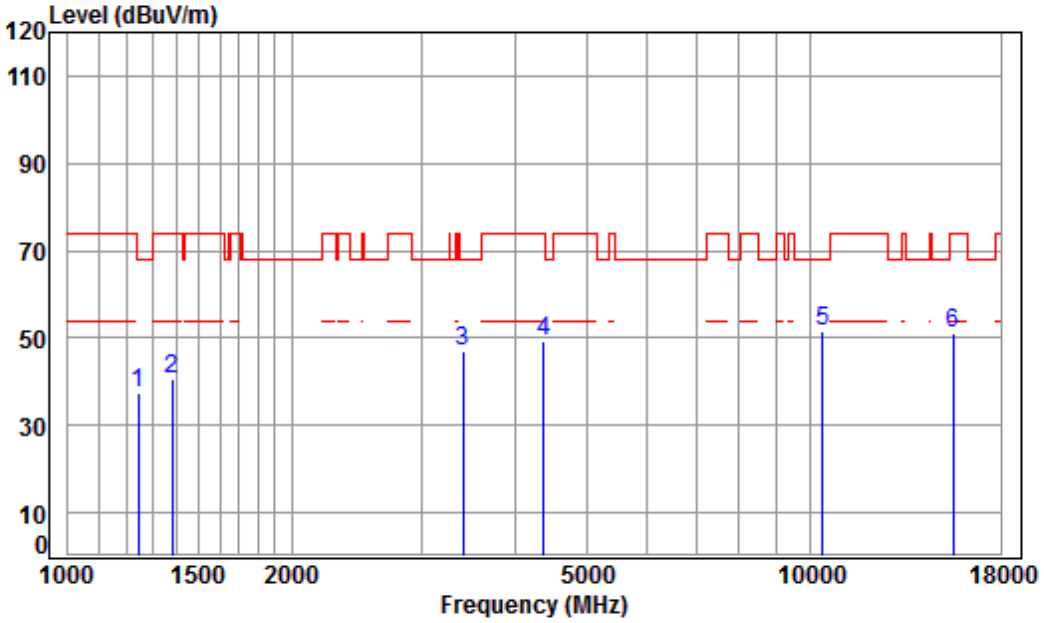
Mode:c; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5180 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1282.193	4.73	24.87	38.06	45.01	36.55	68.20	-31.65	peak
2	1439.343	5.28	25.56	38.05	47.08	39.87	74.00	-34.13	peak
3	3425.675	6.39	32.07	37.95	46.27	46.78	68.20	-21.42	peak
4 pp	4417.841	7.47	33.60	38.22	48.89	51.74	68.20	-16.46	peak
5	10360.000	11.19	37.24	35.09	38.32	51.66	68.20	-16.54	peak
6	15540.000	14.30	41.38	38.30	33.57	50.95	74.00	-23.05	peak

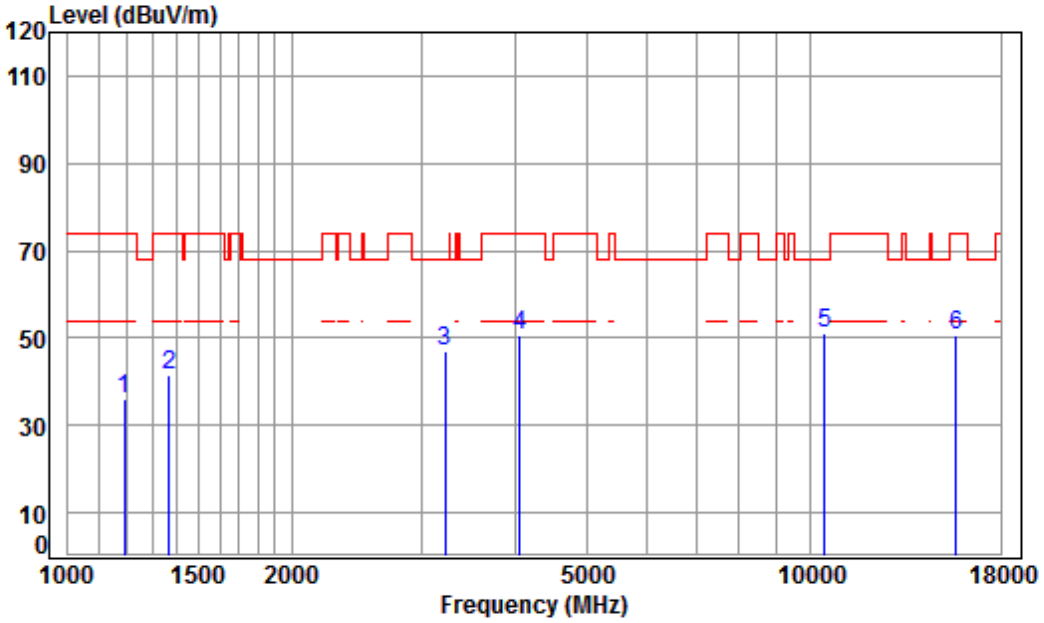
Mode:c; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5180 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1245.663	4.60	24.70	38.07	46.07	37.30	68.20	-30.90	peak
2	1382.262	5.09	25.32	38.05	48.14	40.50	74.00	-33.50	peak
3	3405.929	6.38	32.04	37.94	46.68	47.16	68.20	-21.04	peak
4	4367.058	7.41	33.60	38.20	46.32	49.13	74.00	-24.87	peak
5	pp10360.000	11.19	37.24	35.09	38.18	51.52	68.20	-16.68	peak
6	15540.000	14.30	41.38	38.30	33.87	51.25	74.00	-22.75	peak

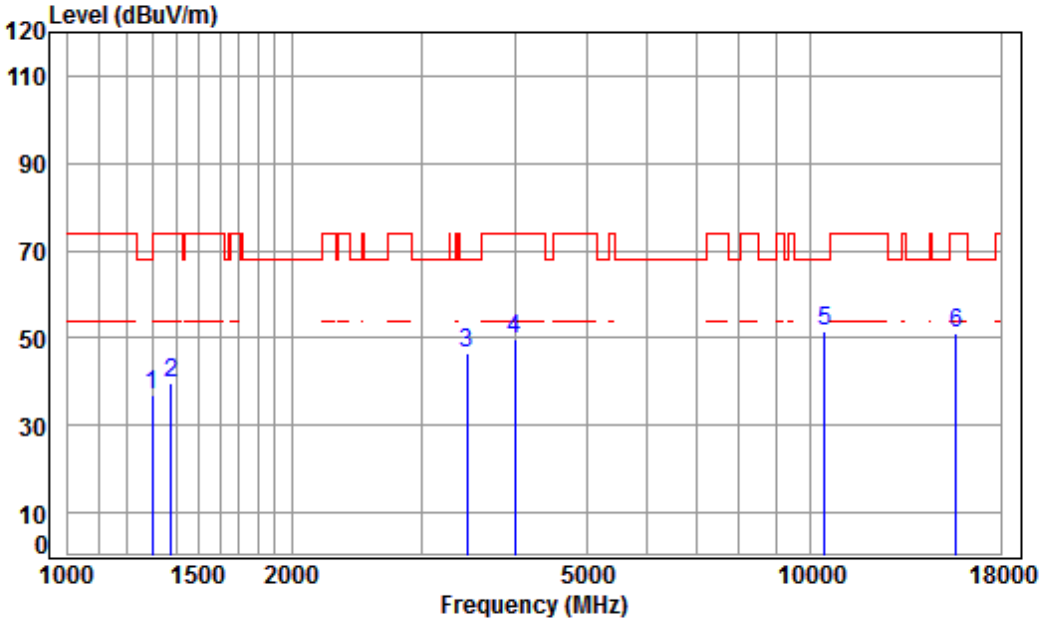
Mode:c; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5220 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1192.811	4.39	24.44	38.07	45.42	36.18	74.00	-37.82	peak
2	1370.328	5.05	25.26	38.05	49.14	41.40	74.00	-32.60	peak
3	3214.623	6.20	31.70	37.92	46.83	46.81	68.20	-21.39	peak
4	4050.904	7.04	33.60	38.03	48.17	50.78	74.00	-23.22	peak
5	pp10440.000	11.25	37.16	35.13	37.90	51.18	68.20	-17.02	peak
6	15660.000	14.48	41.34	38.17	32.92	50.57	74.00	-23.43	peak

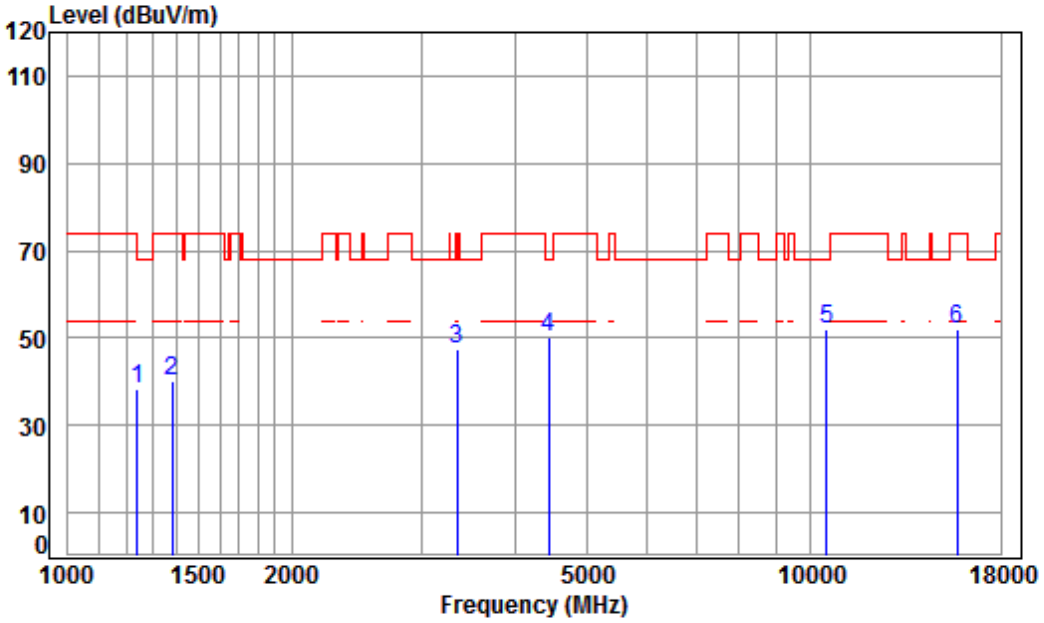
Mode:c; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5220 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1300.858	4.80	24.96	38.06	45.11	36.81	74.00	-37.19	peak
2	1378.273	5.08	25.30	38.05	47.27	39.60	74.00	-34.40	peak
3	3445.535	6.41	32.11	37.95	46.20	46.77	68.20	-21.43	peak
4	3992.781	6.97	33.58	38.00	47.31	49.86	74.00	-24.14	peak
5	pp10440.000	11.25	37.16	35.13	38.38	51.66	68.20	-16.54	peak
6	15660.000	14.48	41.34	38.17	33.60	51.25	74.00	-22.75	peak

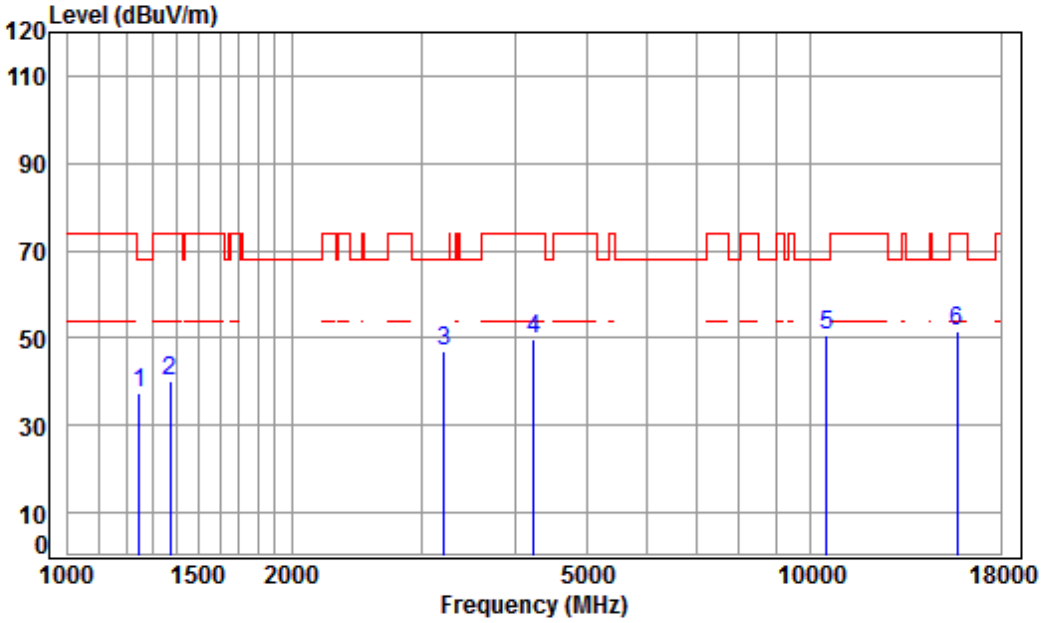
Mode:c; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5240 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1242.068	4.58	24.68	38.07	47.00	38.19	68.20	-30.01	peak
2	1382.262	5.09	25.32	38.05	47.84	40.20	74.00	-33.80	peak
3	3337.710	6.31	31.92	37.94	47.03	47.32	74.00	-26.68	peak
4	4430.628	7.48	33.60	38.23	47.20	50.05	68.20	-18.15	peak
5	pp10480.000	11.28	37.12	35.15	38.61	51.86	68.20	-16.34	peak
6	15720.000	14.57	41.31	38.10	34.05	51.83	74.00	-22.17	peak

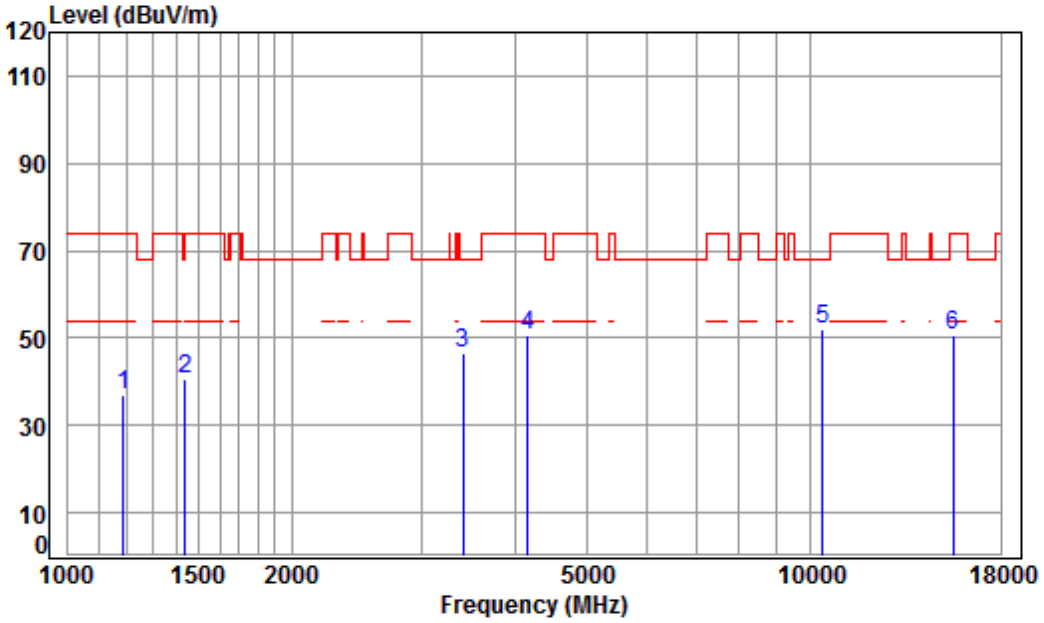
Mode:c; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5240 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1249.269	4.61	24.72	38.07	46.30	37.56	68.20	-30.64	peak
2	1374.295	5.06	25.28	38.05	47.75	40.04	74.00	-33.96	peak
3	3205.345	6.19	31.69	37.92	47.16	47.12	68.20	-21.08	peak
4	4230.396	7.26	33.60	38.13	46.88	49.61	74.00	-24.39	peak
5	pp10480.000	11.28	37.12	35.15	37.47	50.72	68.20	-17.48	peak
6	15720.000	14.57	41.31	38.10	33.87	51.65	74.00	-22.35	peak

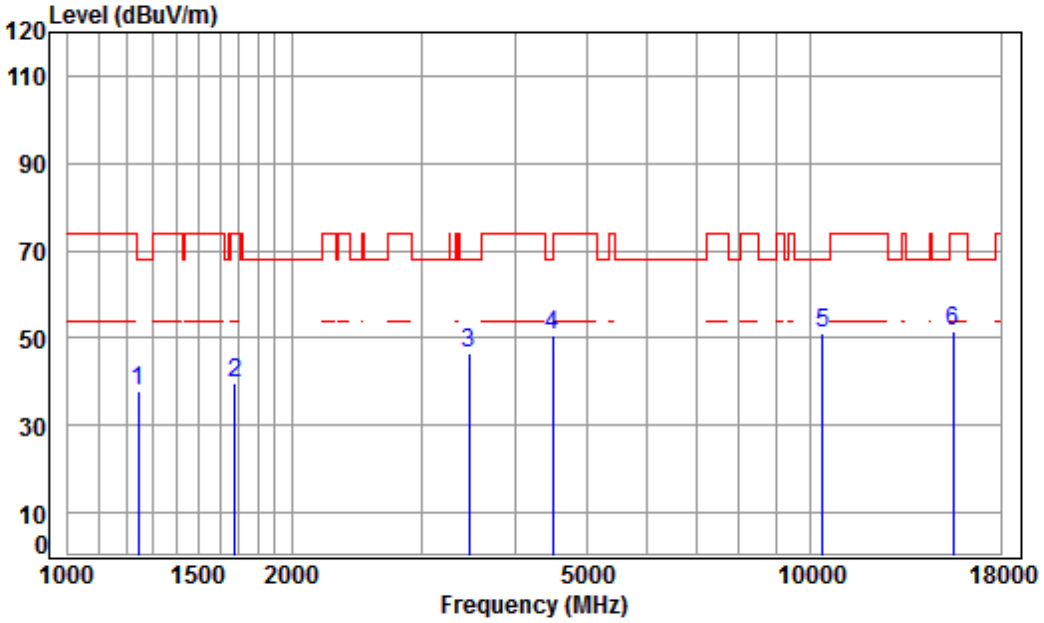
Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5180 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1189.368	4.38	24.43	38.07	45.99	36.73	74.00	-37.27	peak
2	1439.343	5.28	25.56	38.05	47.68	40.47	74.00	-33.53	peak
3	3405.929	6.38	32.04	37.94	46.21	46.69	68.20	-21.51	peak
4	4157.664	7.17	33.60	38.09	47.78	50.46	74.00	-23.54	peak
5	pp10360.000	11.19	37.24	35.09	38.76	52.10	68.20	-16.10	peak
6	15540.000	14.30	41.38	38.30	33.08	50.46	74.00	-23.54	peak

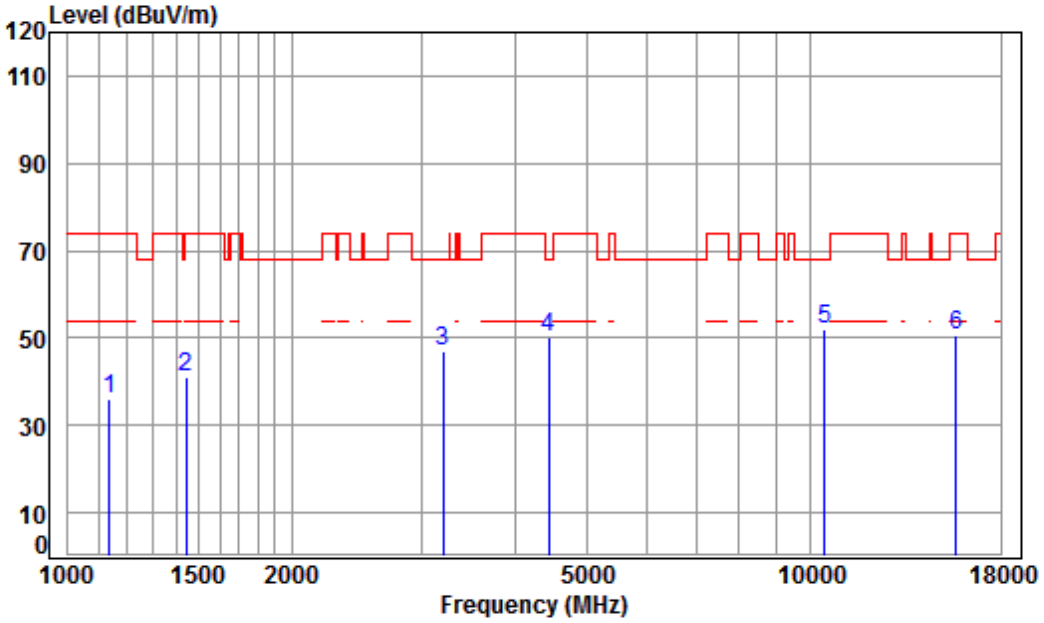
Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5180 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1245.663	4.60	24.70	38.07	46.71	37.94	68.20	-30.26	peak
2	1677.621	5.25	26.58	38.03	45.86	39.66	74.00	-34.34	peak
3	3465.510	6.43	32.14	37.95	45.71	46.33	68.20	-21.87	peak
4	4495.125	7.55	33.60	38.26	47.82	50.71	68.20	-17.49	peak
5	pp10360.000	11.19	37.24	35.09	37.63	50.97	68.20	-17.23	peak
6	15540.000	14.30	41.38	38.30	34.22	51.60	74.00	-22.40	peak

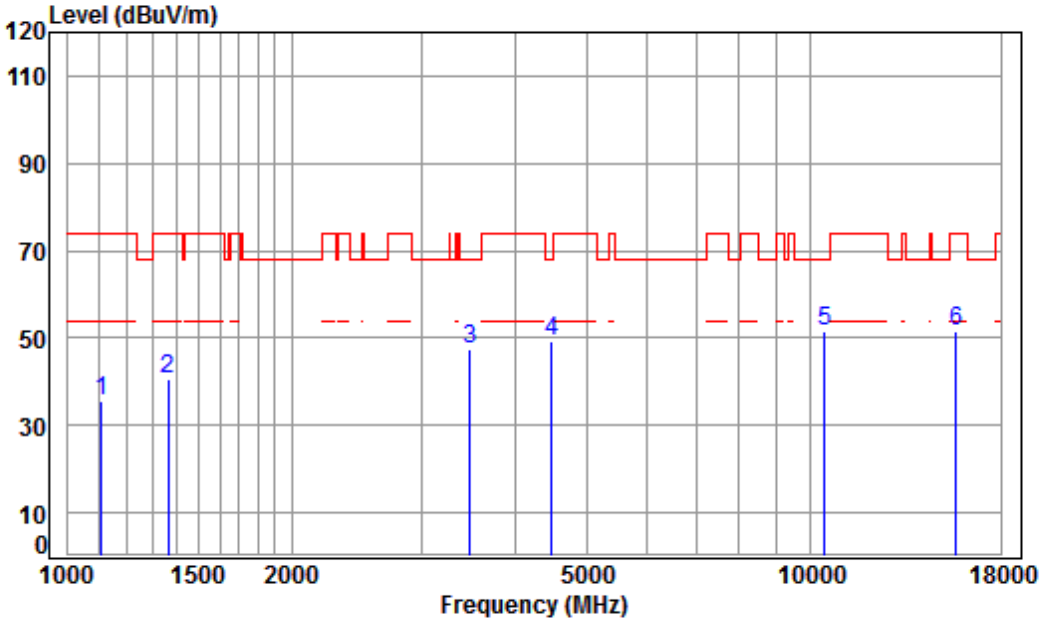
Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5220 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1138.904	4.17	24.17	38.08	45.71	35.97	74.00	-38.03	peak
2	1443.509	5.30	25.57	38.05	48.12	40.94	74.00	-33.06	peak
3	3196.094	6.18	31.67	37.92	47.01	46.94	68.20	-21.26	peak
4	4430.628	7.48	33.60	38.23	47.41	50.26	68.20	-17.94	peak
5	pp10440.000	11.25	37.16	35.13	38.96	52.24	68.20	-15.96	peak
6	15660.000	14.48	41.34	38.17	32.98	50.63	74.00	-23.37	peak

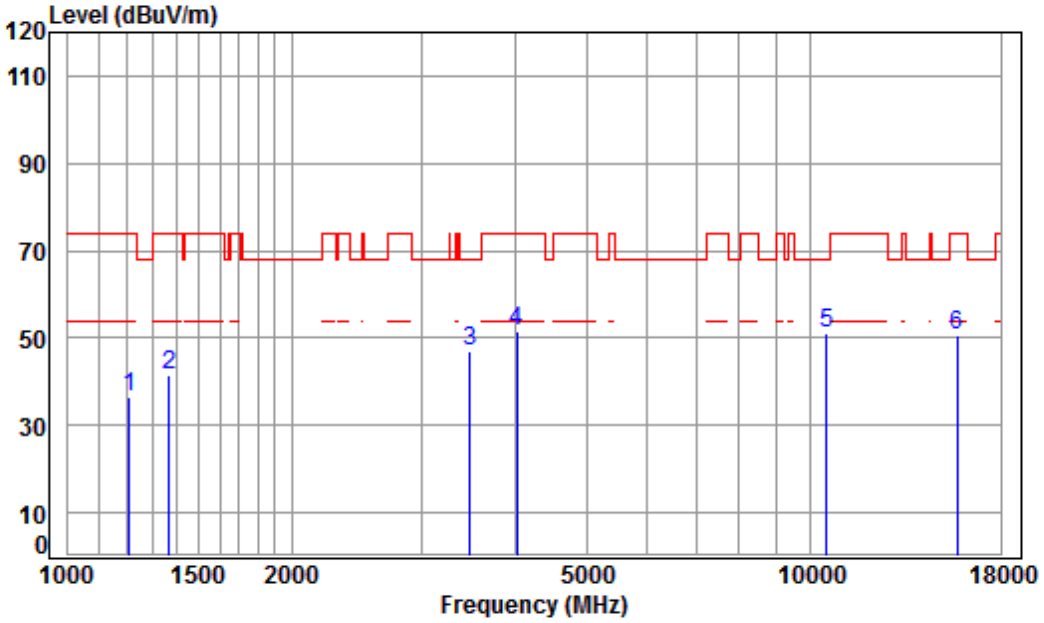
Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5220 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1109.660	4.05	24.02	38.08	45.68	35.67	74.00	-38.33	peak
2	1366.374	5.04	25.25	38.05	48.21	40.45	74.00	-33.55	peak
3	3475.541	6.44	32.16	37.95	46.74	47.39	68.20	-20.81	peak
4	4482.150	7.54	33.60	38.26	46.52	49.40	68.20	-18.80	peak
5	pp10440.000	11.25	37.16	35.13	38.17	51.45	68.20	-16.75	peak
6	15660.000	14.48	41.34	38.17	33.92	51.57	74.00	-22.43	peak

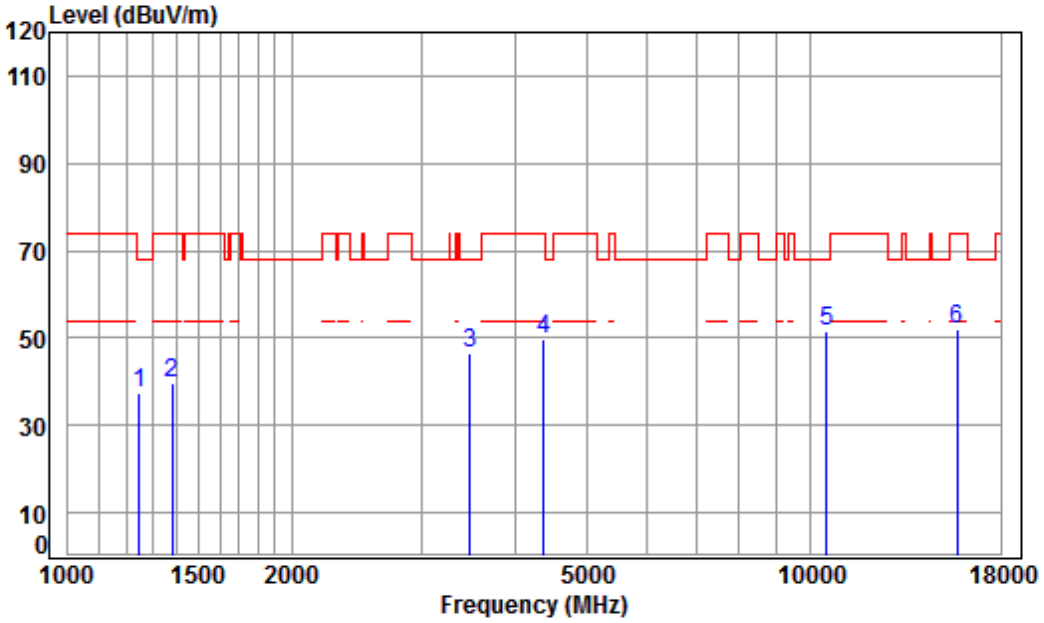
Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5240 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1210.174	4.46	24.53	38.07	45.36	36.28	74.00	-37.72	peak
2	1370.328	5.05	25.26	38.05	49.44	41.70	74.00	-32.30	peak
3	3475.541	6.44	32.16	37.95	46.54	47.19	68.20	-21.01	peak
4	4015.929	7.00	33.60	38.01	49.11	51.70	74.00	-22.30	peak
5	pp10480.000	11.28	37.12	35.15	37.93	51.18	68.20	-17.02	peak
6	15720.000	14.57	41.31	38.10	32.78	50.56	74.00	-23.44	peak

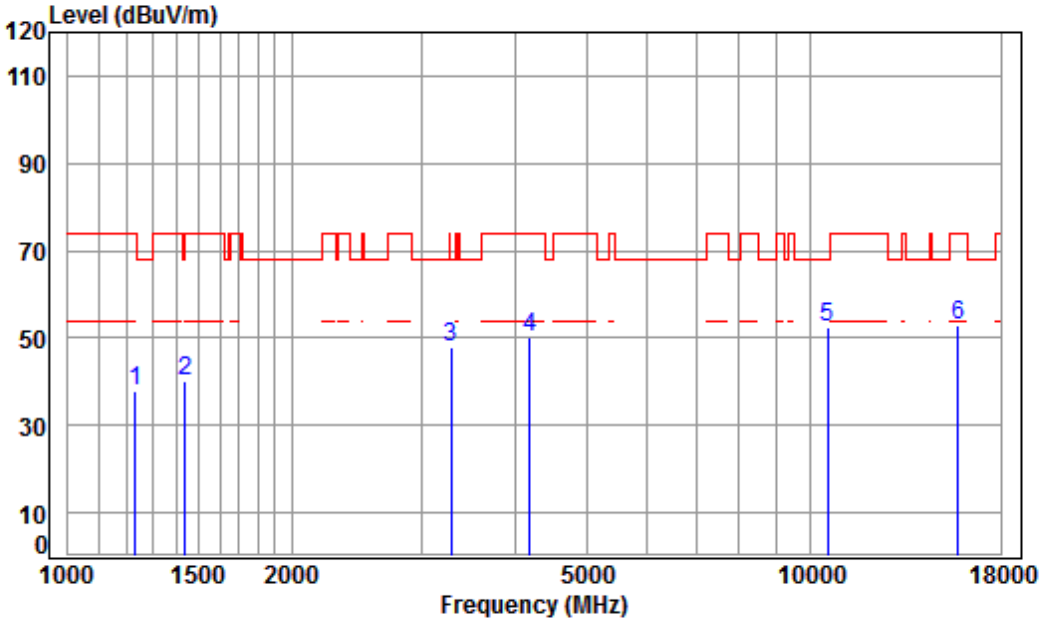
Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5240 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1249.269	4.61	24.72	38.07	46.00	37.26	68.20	-30.94	peak
2	1382.262	5.09	25.32	38.05	47.43	39.79	74.00	-34.21	peak
3	3475.541	6.44	32.16	37.95	45.93	46.58	68.20	-21.62	peak
4	4367.058	7.41	33.60	38.20	47.10	49.91	74.00	-24.09	peak
5	pp10480.000	11.28	37.12	35.15	38.46	51.71	68.20	-16.49	peak
6	15720.000	14.57	41.31	38.10	34.14	51.92	74.00	-22.08	peak

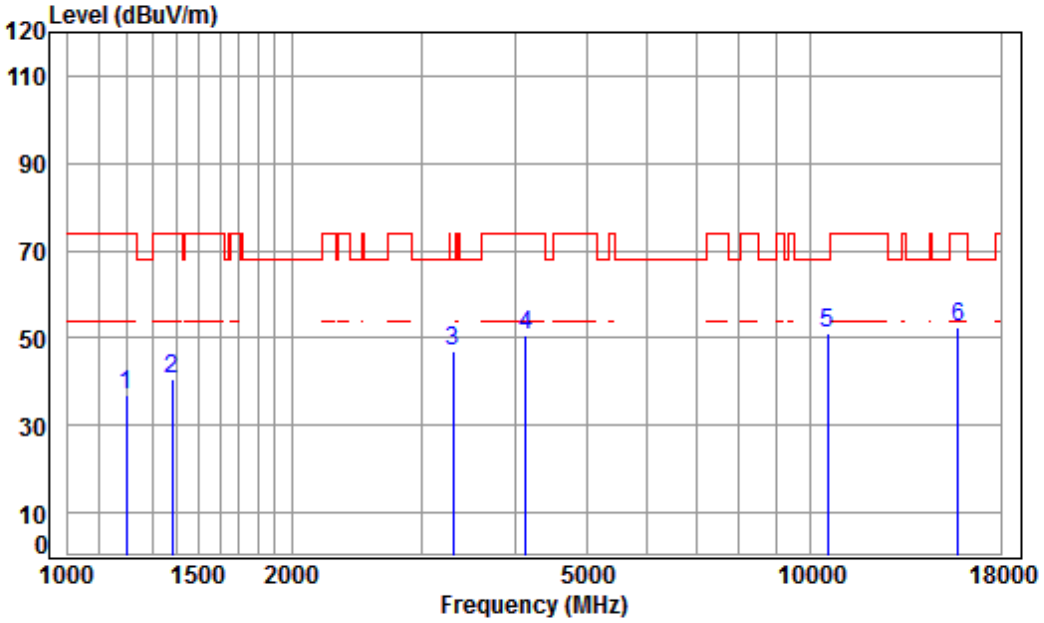
Mode:d; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5260 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1231.345	4.54	24.63	38.07	46.71	37.81	74.00	-36.19	peak
2	1439.343	5.28	25.56	38.05	47.47	40.26	74.00	-33.74	peak
3	3280.326	6.26	31.82	37.93	47.95	48.10	68.20	-20.10	peak
4	4181.768	7.20	33.60	38.10	47.57	50.27	74.00	-23.73	peak
5	pp10520.000	11.30	37.12	35.17	39.16	52.41	68.20	-15.79	peak
6	15780.000	14.66	41.29	38.04	34.88	52.79	74.00	-21.21	peak

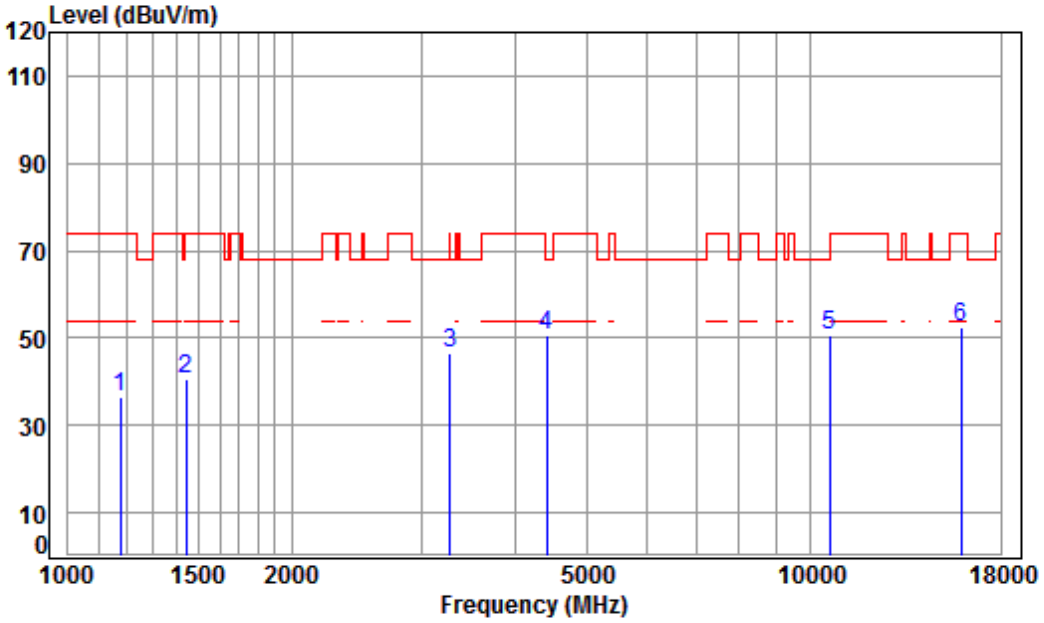
Mode:d; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5260 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1199.726	4.42	24.48	38.07	46.20	37.03	74.00	-36.97	peak
2	1382.262	5.09	25.32	38.05	48.20	40.56	74.00	-33.44	peak
3	3299.344	6.28	31.86	37.93	46.72	46.93	68.20	-21.27	peak
4	4133.699	7.14	33.60	38.07	48.10	50.77	74.00	-23.23	peak
5	pp10520.000	11.30	37.12	35.17	37.83	51.08	68.20	-17.12	peak
6	15780.000	14.66	41.29	38.04	34.56	52.47	74.00	-21.53	peak

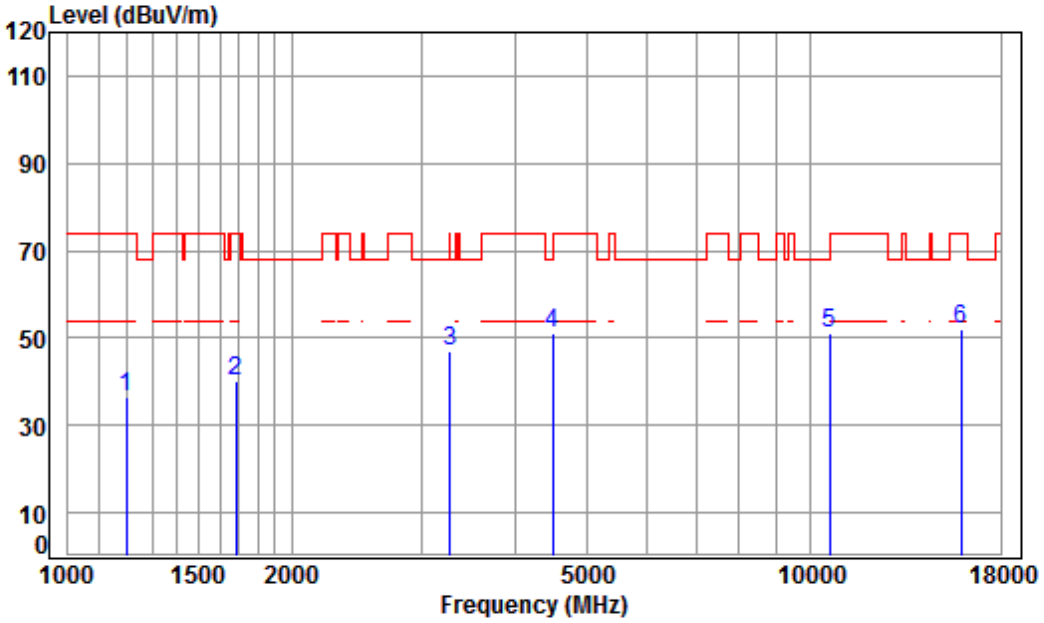
Mode:d; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5300 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1175.697	4.32	24.36	38.08	45.80	36.40	74.00	-37.60	peak
2	1443.509	5.30	25.57	38.05	47.70	40.52	74.00	-33.48	peak
3	3270.858	6.25	31.80	37.93	46.36	46.48	68.20	-21.72	peak
4	4405.090	7.46	33.60	38.22	47.66	50.50	68.20	-17.70	peak
5	pp10600.000	11.36	37.22	35.21	37.28	50.65	68.20	-17.55	peak
6	15900.000	14.84	41.24	37.91	34.15	52.32	74.00	-21.68	peak

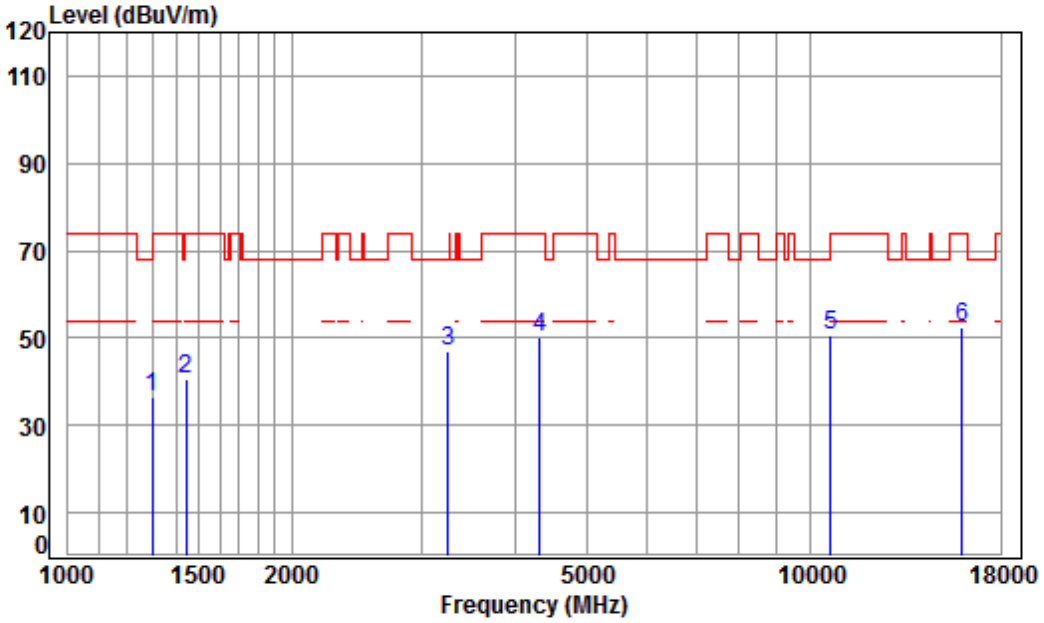
Mode:d; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5300 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1199.726	4.42	24.48	38.07	45.64	36.47	74.00	-37.53	peak
2	1682.477	5.25	26.60	38.02	46.42	40.25	74.00	-33.75	peak
3	3270.858	6.25	31.80	37.93	46.86	46.98	68.20	-21.22	peak
4 pp	4495.125	7.55	33.60	38.26	48.20	51.09	68.20	-17.11	peak
5	10600.000	11.36	37.22	35.21	37.67	51.04	68.20	-17.16	peak
6	15900.000	14.84	41.24	37.91	33.74	51.91	74.00	-22.09	peak

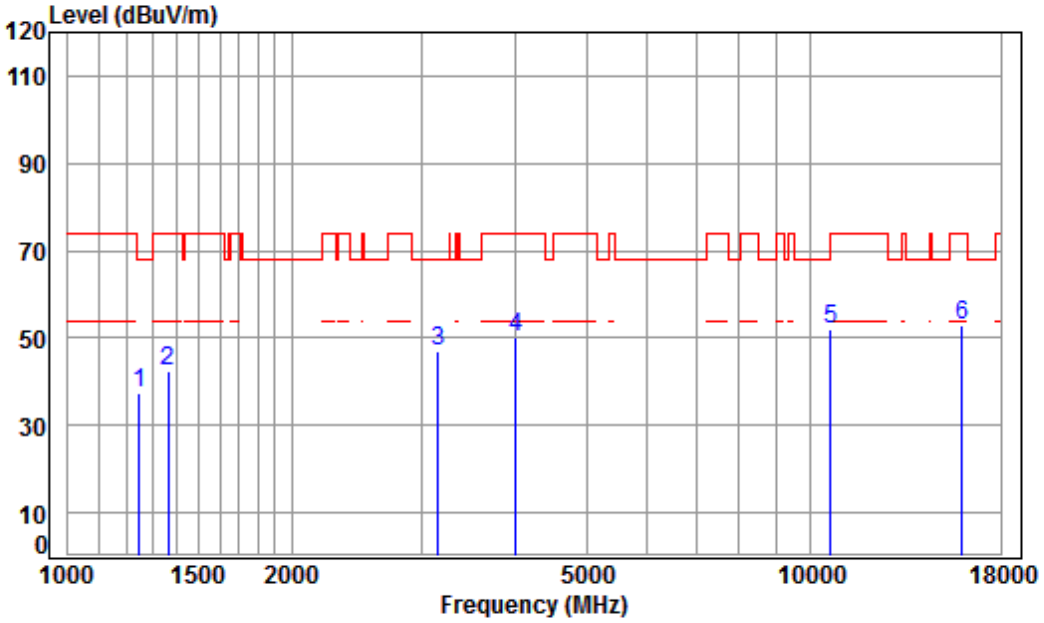
Mode:d; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5320 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1300.858	4.80	24.96	38.06	44.62	36.32	74.00	-37.68	peak
2	1443.509	5.30	25.57	38.05	47.70	40.52	74.00	-33.48	peak
3 pp	3252.005	6.23	31.77	37.93	46.83	46.90	68.20	-21.30	peak
4	4316.859	7.36	33.60	38.17	47.50	50.29	74.00	-23.71	peak
5	10640.000	11.39	37.27	35.23	37.25	50.68	74.00	-23.32	peak
6	15960.000	14.93	41.22	37.84	34.23	52.54	74.00	-21.46	peak

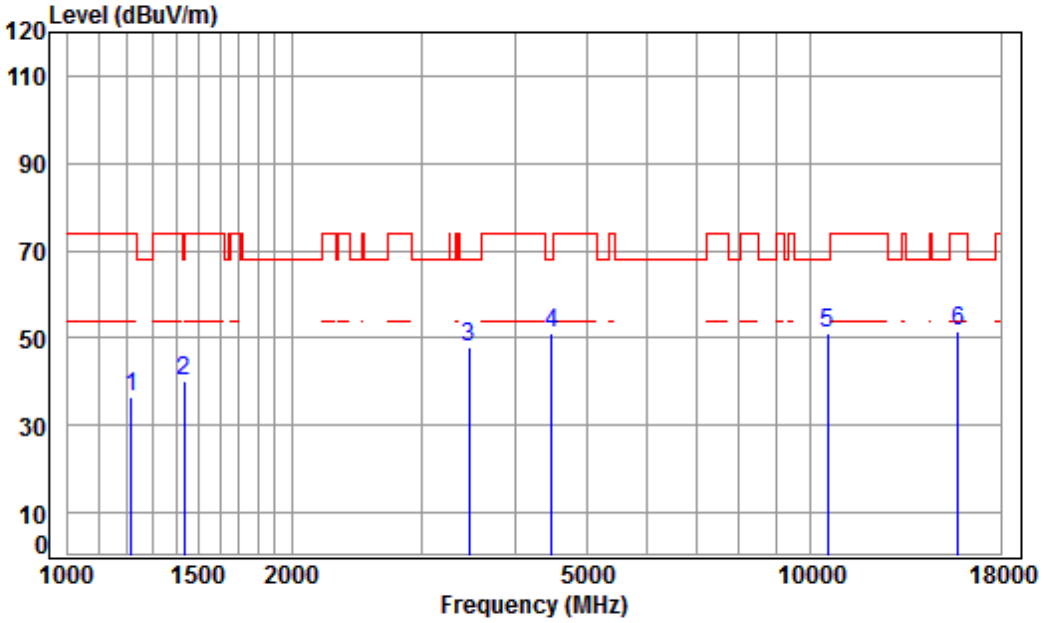
Mode:d; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5320 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1249.269	4.61	24.72	38.07	46.05	37.31	68.20	-30.89	peak
2	1366.374	5.04	25.25	38.05	50.20	42.44	74.00	-31.56	peak
3	3150.237	6.13	31.59	37.92	47.03	46.83	68.20	-21.37	peak
4	4004.339	6.99	33.60	38.00	47.42	50.01	74.00	-23.99	peak
5	10640.000	11.39	37.27	35.23	38.55	51.98	74.00	-22.02	peak
6	pp15960.000	14.93	41.22	37.84	34.41	52.72	74.00	-21.28	peak

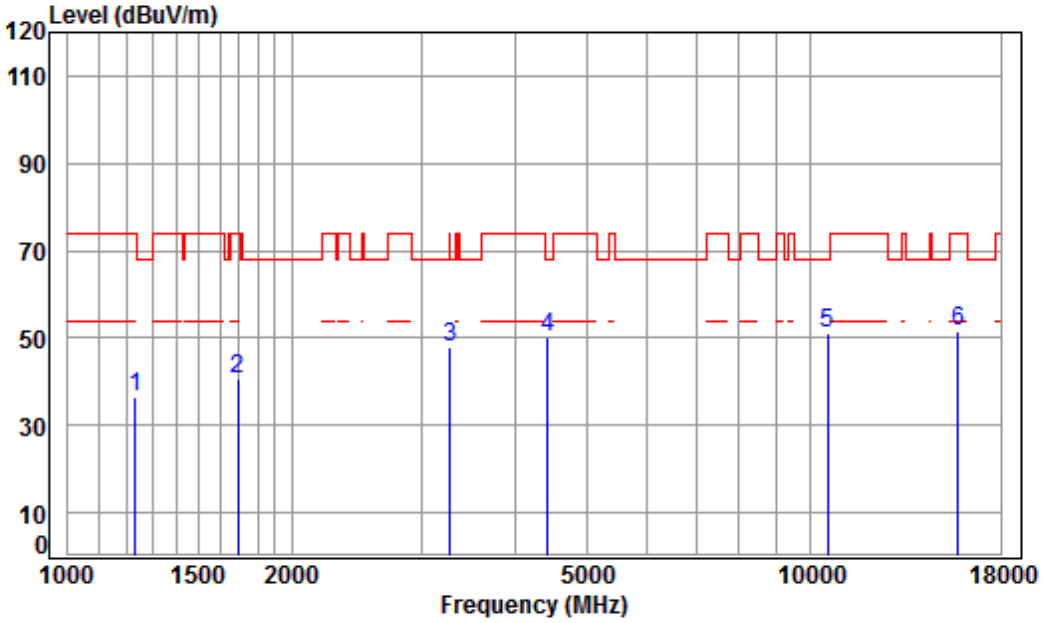
Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5260 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1217.190	4.49	24.56	38.07	45.46	36.44	74.00	-37.56	peak
2	1435.189	5.27	25.54	38.05	47.59	40.35	74.00	-33.65	peak
3	3465.510	6.43	32.14	37.95	47.32	47.94	68.20	-20.26	peak
4	4482.150	7.54	33.60	38.26	48.03	50.91	68.20	-17.29	peak
5	pp10520.000	11.30	37.12	35.17	38.06	51.31	68.20	-16.89	peak
6	15780.000	14.66	41.29	38.04	33.52	51.43	74.00	-22.57	peak

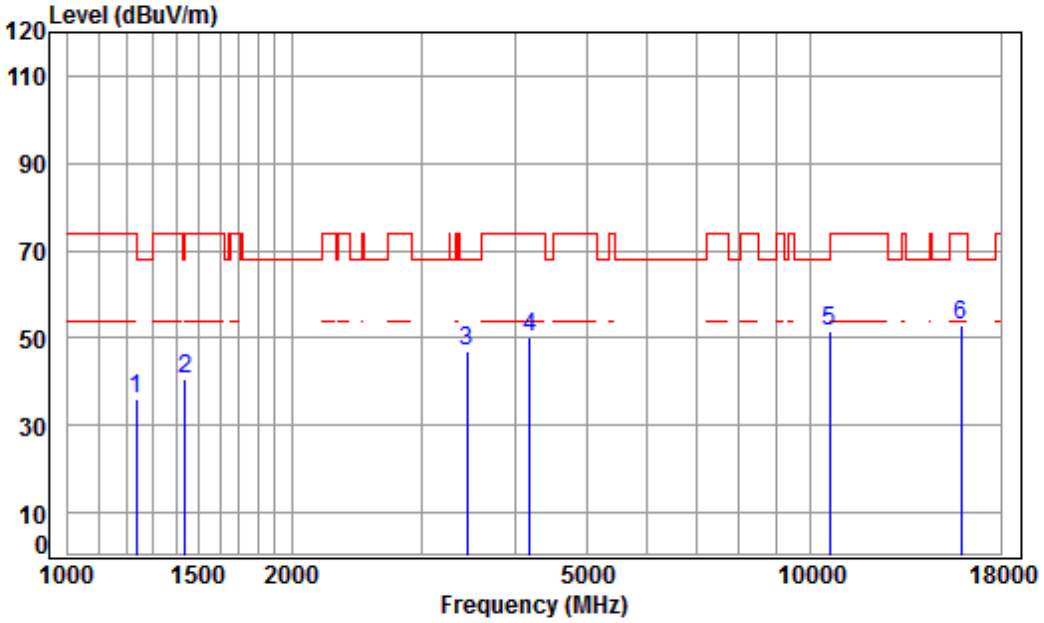
Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5260 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1231.345	4.54	24.63	38.07	45.45	36.55	74.00	-37.45	peak
2	1692.231	5.24	26.64	38.02	46.55	40.41	74.00	-33.59	peak
3	3270.858	6.25	31.80	37.93	47.84	47.96	68.20	-20.24	peak
4	4417.841	7.47	33.60	38.22	47.52	50.37	68.20	-17.83	peak
5	pp10520.000	11.30	37.12	35.17	37.81	51.06	68.20	-17.14	peak
6	15780.000	14.66	41.29	38.04	33.81	51.72	74.00	-22.28	peak

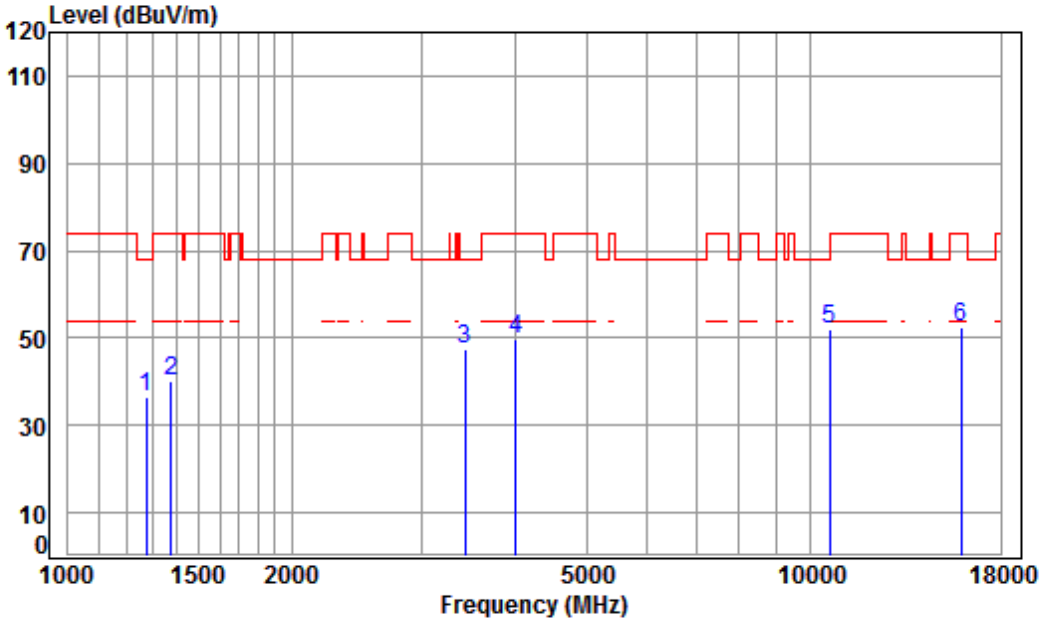
Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5300 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1234.909	4.55	24.65	38.07	45.14	36.27	74.00	-37.73	peak
2	1439.343	5.28	25.56	38.05	48.00	40.79	74.00	-33.21	peak
3	3445.535	6.41	32.11	37.95	46.22	46.79	68.20	-21.41	peak
4	4181.768	7.20	33.60	38.10	47.46	50.16	74.00	-23.84	peak
5	pp10600.000	11.36	37.22	35.21	37.98	51.35	68.20	-16.85	peak
6	15900.000	14.84	41.24	37.91	34.75	52.92	74.00	-21.08	peak

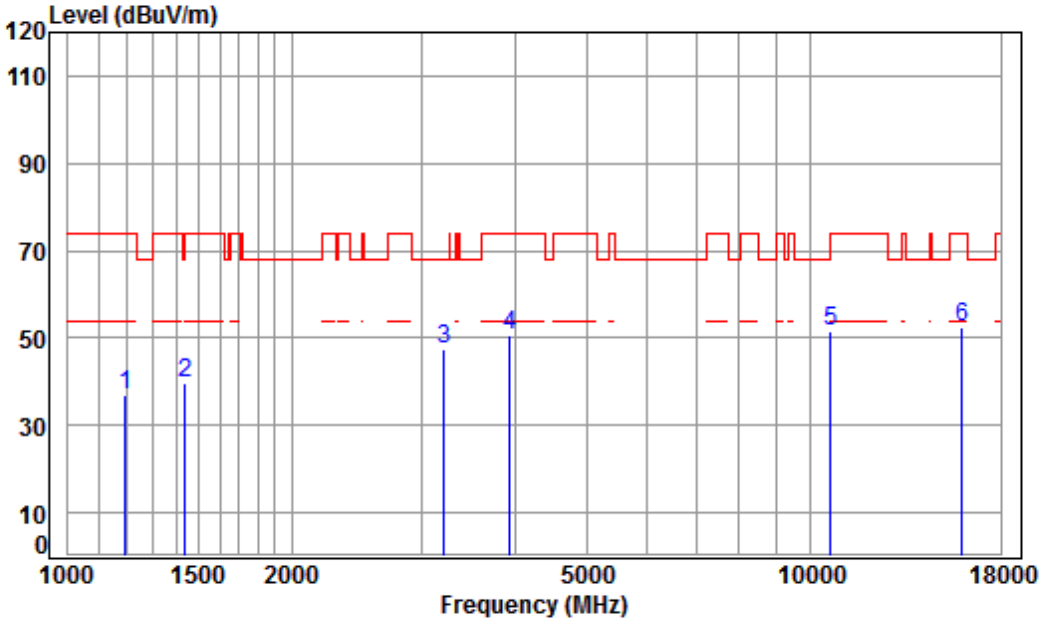
Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5300 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1274.802	4.71	24.84	38.06	44.80	36.29	68.20	-31.91	peak
2	1378.273	5.08	25.30	38.05	47.76	40.09	74.00	-33.91	peak
3	3425.675	6.39	32.07	37.95	46.84	47.35	68.20	-20.85	peak
4	4004.339	6.99	33.60	38.00	47.13	49.72	74.00	-24.28	peak
5	pp10600.000	11.36	37.22	35.21	38.79	52.16	68.20	-16.04	peak
6	15900.000	14.84	41.24	37.91	34.12	52.29	74.00	-21.71	peak

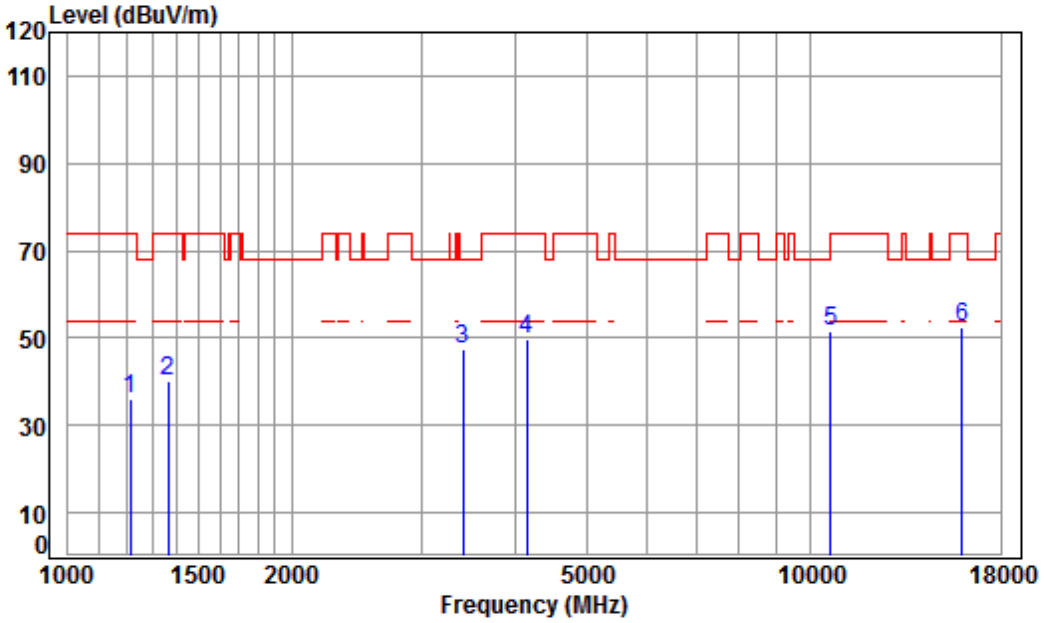
Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5320 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1196.264	4.40	24.46	38.07	46.10	36.89	74.00	-37.11	peak
2	1439.343	5.28	25.56	38.05	46.80	39.59	74.00	-34.41	peak
3 pp	3205.345	6.19	31.69	37.92	47.47	47.43	68.20	-20.77	peak
4	3935.493	6.92	33.43	37.99	48.27	50.63	74.00	-23.37	peak
5	10640.000	11.39	37.27	35.23	38.10	51.53	74.00	-22.47	peak
6	15960.000	14.93	41.22	37.84	33.94	52.25	74.00	-21.75	peak

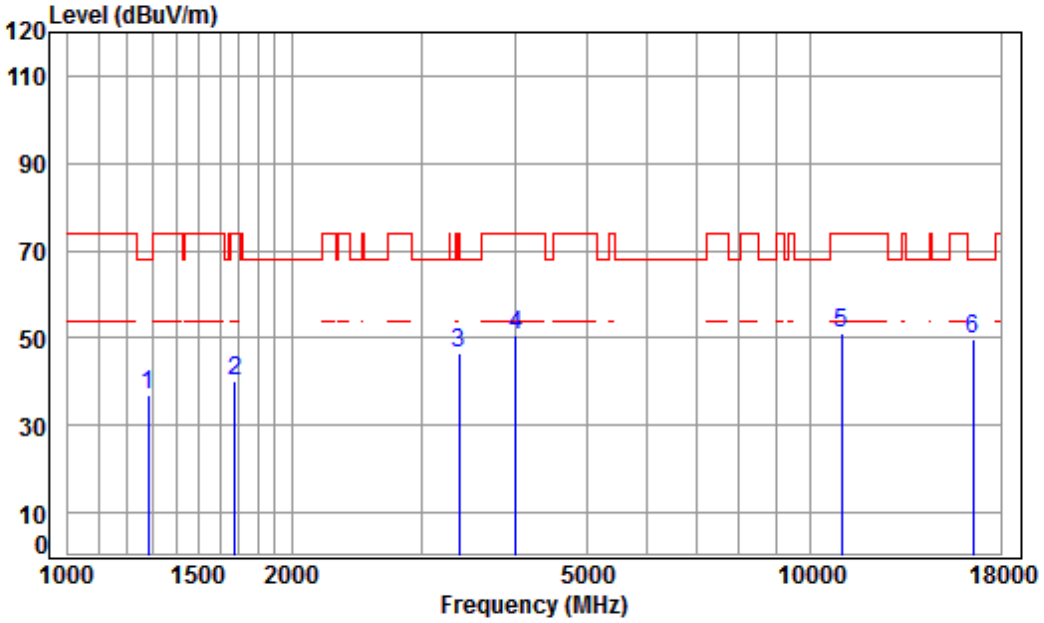
Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5320 TX RSE
Note : 5G WIFI 11N20

		Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
		MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1		1213.677	4.47	24.55	38.07	45.32	36.27	74.00	-37.73	peak
2		1366.374	5.04	25.25	38.05	47.79	40.03	74.00	-33.97	peak
3	pp	3405.929	6.38	32.04	37.94	47.16	47.64	68.20	-20.56	peak
4		4145.664	7.16	33.60	38.08	47.24	49.92	74.00	-24.08	peak
5		10640.000	11.39	37.27	35.23	38.11	51.54	74.00	-22.46	peak
6		15960.000	14.93	41.22	37.84	34.14	52.45	74.00	-21.55	peak

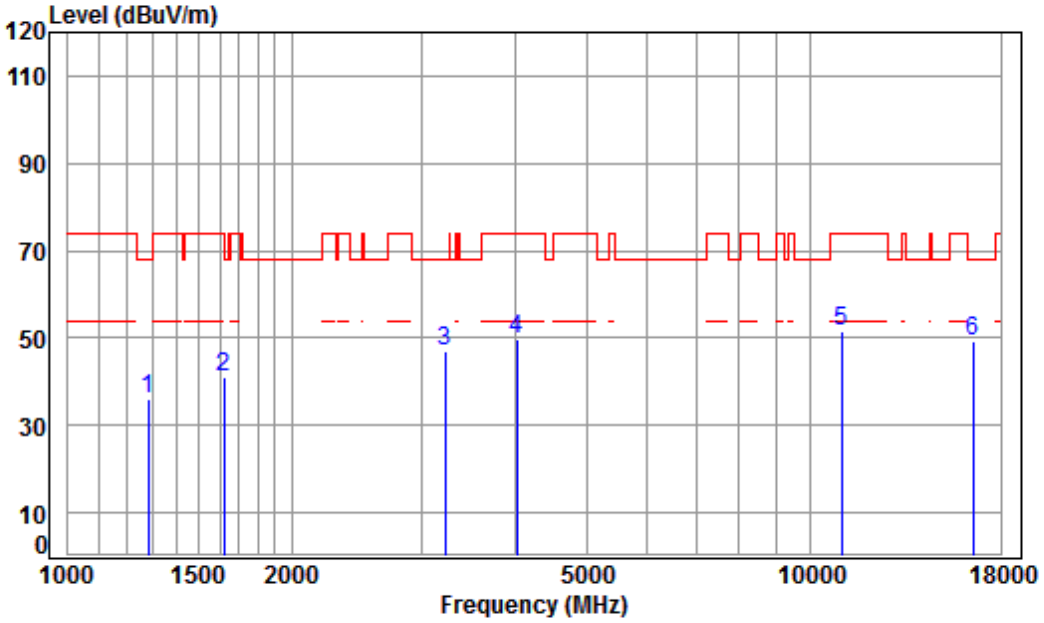
Mode:e; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5500 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1282.193	4.73	24.87	38.06	45.52	37.06	68.20	-31.14	peak
2	1677.621	5.25	26.58	38.03	46.18	39.98	74.00	-34.02	peak
3	3357.061	6.33	31.96	37.94	46.27	46.62	74.00	-27.38	peak
4	4004.339	6.99	33.60	38.00	47.89	50.48	74.00	-23.52	peak
5	11000.000	11.63	37.70	35.40	37.01	50.94	74.00	-23.06	peak
6	pp16500.000	14.50	42.70	37.04	29.41	49.57	68.20	-18.63	peak

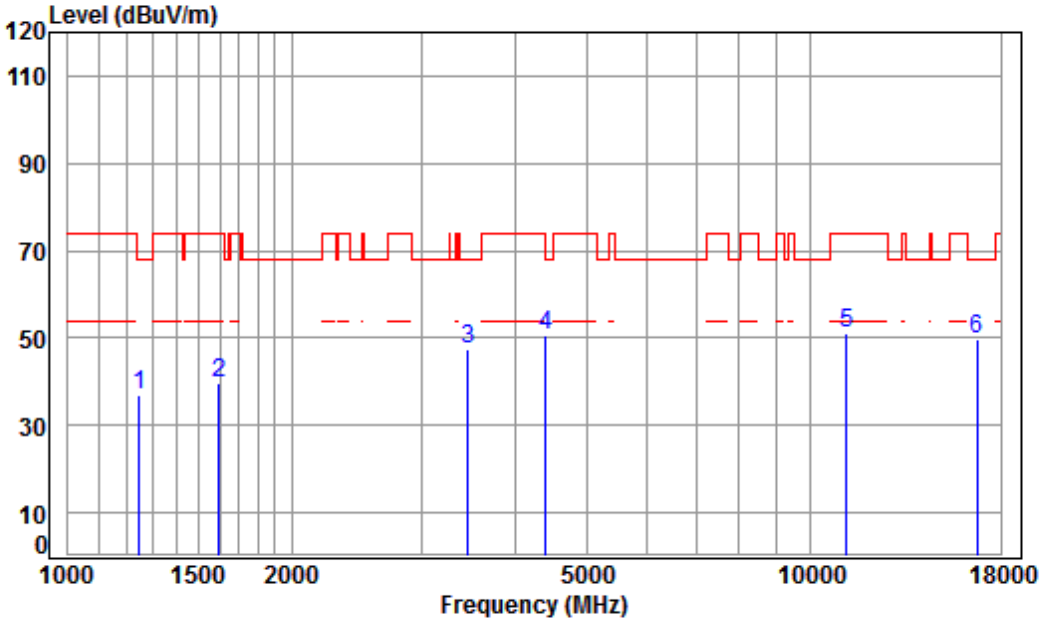
Mode:e; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5500 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1282.193	4.73	24.87	38.06	44.73	36.27	68.20	-31.93	peak
2	1620.431	5.32	26.34	38.03	47.28	40.91	74.00	-33.09	peak
3	3214.623	6.20	31.70	37.92	46.83	46.81	68.20	-21.39	peak
4	4015.929	7.00	33.60	38.01	47.14	49.73	74.00	-24.27	peak
5	11000.000	11.63	37.70	35.40	37.46	51.39	74.00	-22.61	peak
6	pp16500.000	14.50	42.70	37.04	29.07	49.23	68.20	-18.97	peak

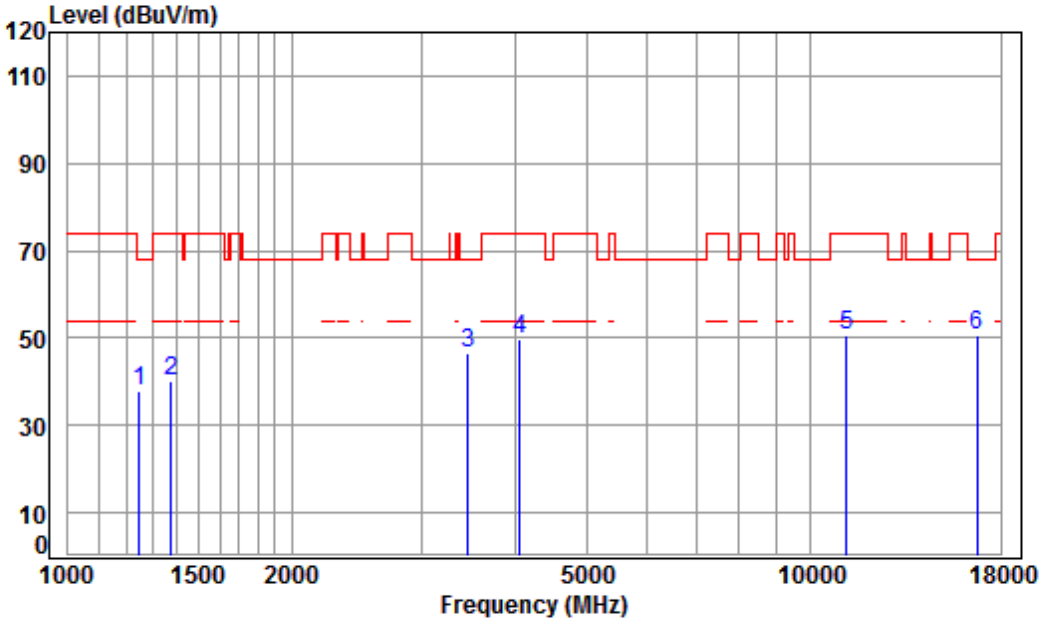
Mode:e; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5580 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1249.269	4.61	24.72	38.07	45.67	36.93	68.20	-31.27	peak
2	1597.181	5.35	26.24	38.03	46.26	39.82	74.00	-34.18	peak
3	3455.508	6.42	32.13	37.95	46.84	47.44	68.20	-20.76	peak
4	4392.376	7.44	33.60	38.21	47.64	50.47	74.00	-23.53	peak
5	11160.000	11.80	37.83	35.60	37.14	51.17	74.00	-22.83	peak
6	pp16740.000	15.57	42.75	36.68	28.32	49.96	68.20	-18.24	peak

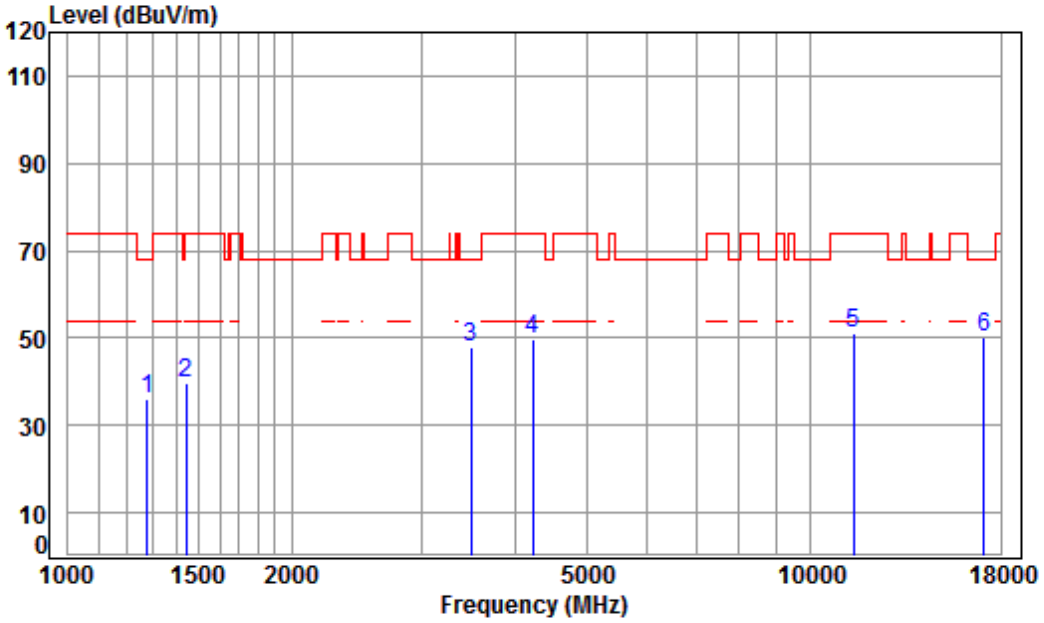
Mode:e; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5580 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1249.269	4.61	24.72	38.07	46.44	37.70	68.20	-30.50	peak
2	1378.273	5.08	25.30	38.05	47.81	40.14	74.00	-33.86	peak
3	3455.508	6.42	32.13	37.95	46.16	46.76	68.20	-21.44	peak
4	4050.904	7.04	33.60	38.03	47.16	49.77	74.00	-24.23	peak
5	11160.000	11.80	37.83	35.60	36.56	50.59	74.00	-23.41	peak
6	pp16740.000	15.57	42.75	36.68	29.20	50.84	68.20	-17.36	peak

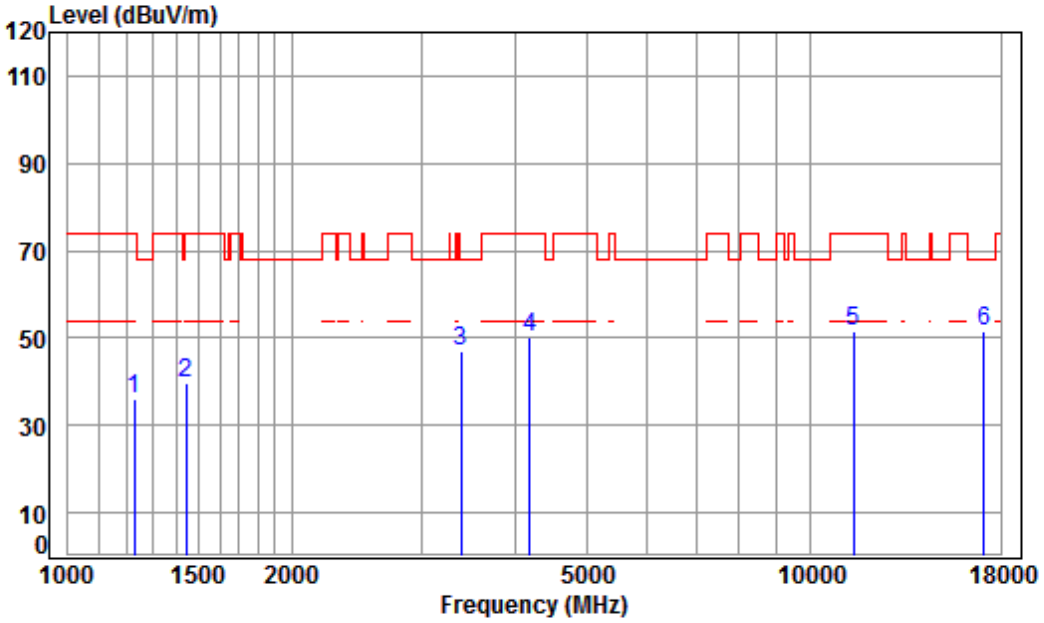
Mode:e; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5700 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1278.492	4.72	24.85	38.06	44.38	35.89	68.20	-32.31	peak
2	1443.509	5.30	25.57	38.05	46.80	39.62	74.00	-34.38	peak
3	3485.601	6.45	32.18	37.95	47.09	47.77	68.20	-20.43	peak
4	4218.186	7.24	33.60	38.12	47.05	49.77	74.00	-24.23	peak
5	11400.000	12.04	38.02	35.89	36.83	51.00	74.00	-23.00	peak
6	pp17100.000	16.49	42.92	36.25	26.97	50.13	68.20	-18.07	peak

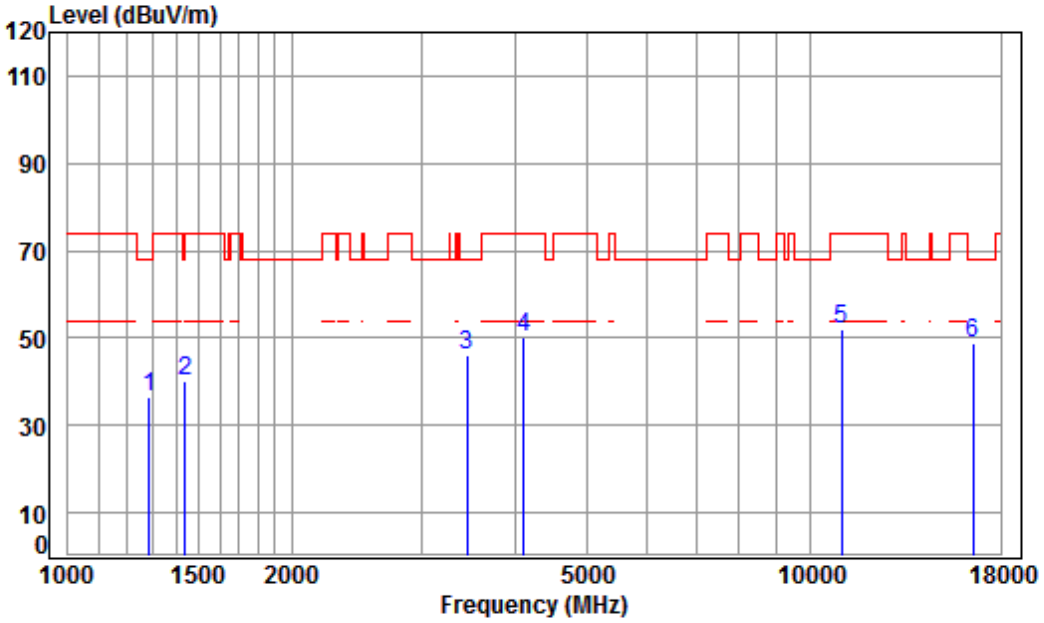
Mode:e; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5700 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1227.791	4.53	24.61	38.07	45.20	36.27	74.00	-37.73	peak
2	1443.509	5.30	25.57	38.05	46.65	39.47	74.00	-34.53	peak
3	3376.523	6.35	31.99	37.94	46.47	46.87	68.20	-21.33	peak
4	4181.768	7.20	33.60	38.10	47.28	49.98	74.00	-24.02	peak
5	11400.000	12.04	38.02	35.89	37.20	51.37	74.00	-22.63	peak
6	pp17100.000	16.49	42.92	36.25	28.45	51.61	68.20	-16.59	peak

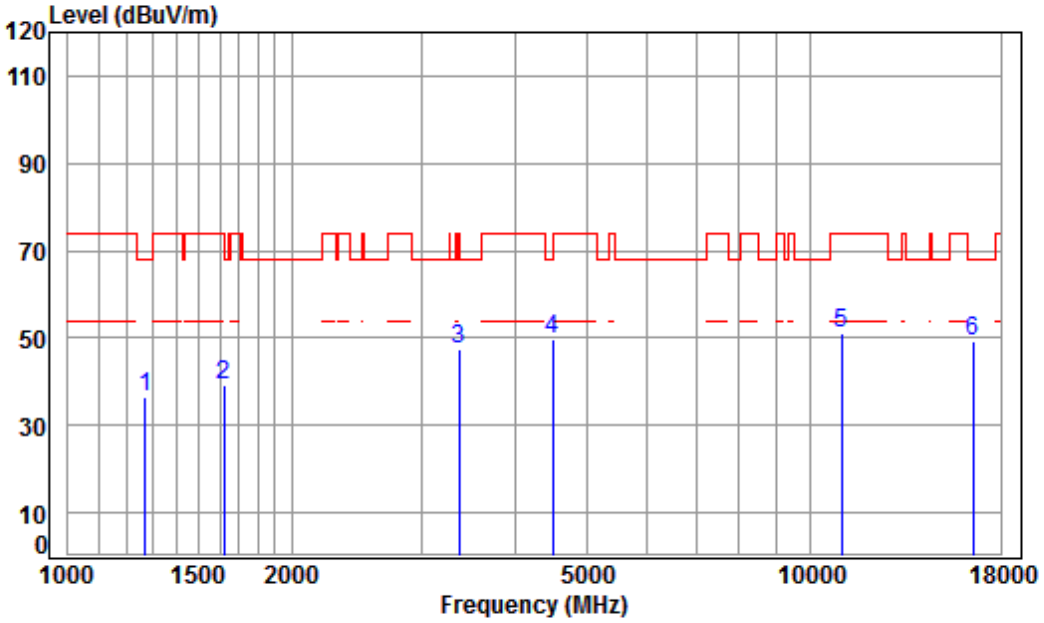
Mode:e; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5500 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1285.904	4.75	24.89	38.06	45.05	36.63	68.20	-31.57	peak
2	1439.343	5.28	25.56	38.05	47.30	40.09	74.00	-33.91	peak
3	3445.535	6.41	32.11	37.95	45.63	46.20	68.20	-22.00	peak
4	4109.872	7.11	33.60	38.06	47.68	50.33	74.00	-23.67	peak
5	11000.000	11.63	37.70	35.40	38.00	51.93	74.00	-22.07	peak
6	pp16500.000	14.50	42.70	37.04	28.72	48.88	68.20	-19.32	peak

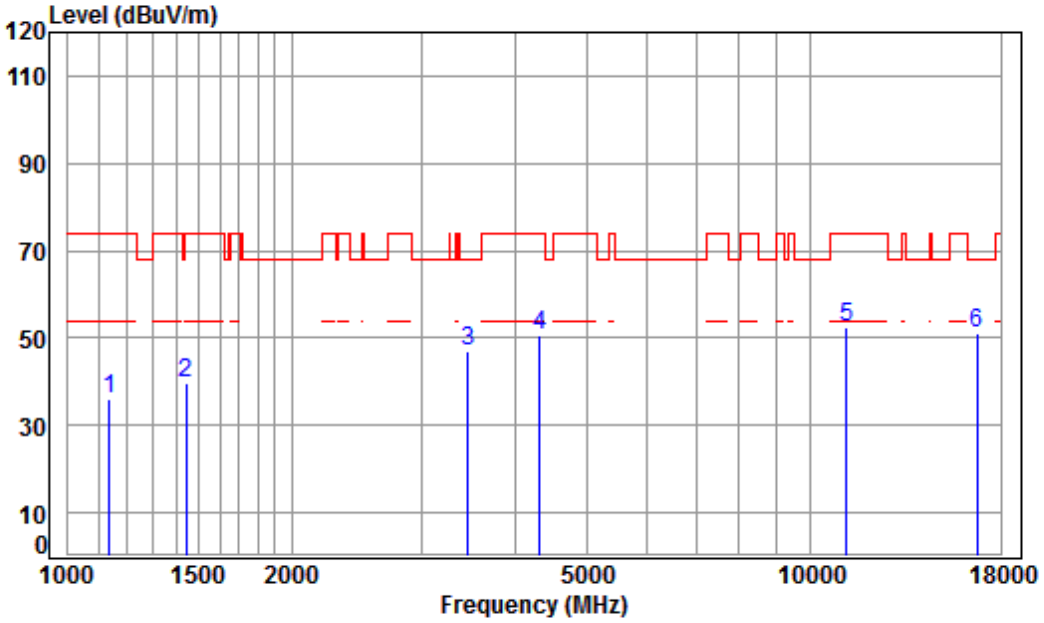
Mode:e; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5500 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1271.123	4.69	24.82	38.07	45.07	36.51	68.20	-31.69	peak
2	1620.431	5.32	26.34	38.03	45.67	39.30	74.00	-34.70	peak
3	3357.061	6.33	31.96	37.94	47.06	47.41	74.00	-26.59	peak
4 pp	4495.125	7.55	33.60	38.26	46.65	49.54	68.20	-18.66	peak
5	11000.000	11.63	37.70	35.40	37.28	51.21	74.00	-22.79	peak
6	16500.000	14.50	42.70	37.04	29.08	49.24	68.20	-18.96	peak

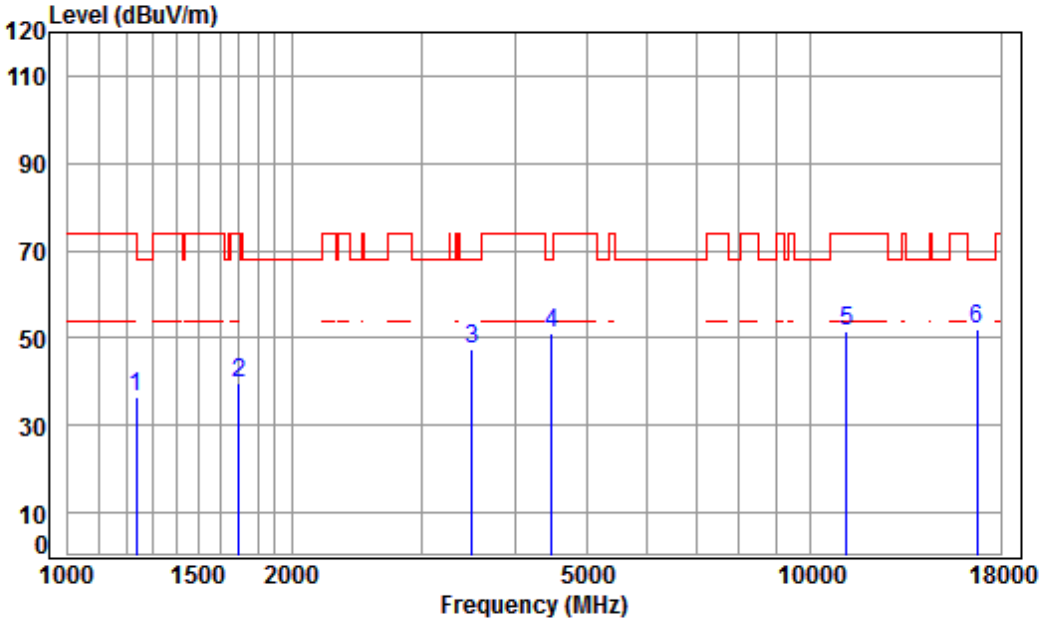
Mode:e; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5580 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1138.904	4.17	24.17	38.08	45.82	36.08	74.00	-37.92	peak
2	1443.509	5.30	25.57	38.05	46.95	39.77	74.00	-34.23	peak
3	3455.508	6.42	32.13	37.95	46.48	47.08	68.20	-21.12	peak
4	4316.859	7.36	33.60	38.17	47.66	50.45	74.00	-23.55	peak
5	11160.000	11.80	37.83	35.60	38.34	52.37	74.00	-21.63	peak
6	pp16740.000	15.57	42.75	36.68	29.34	50.98	68.20	-17.22	peak

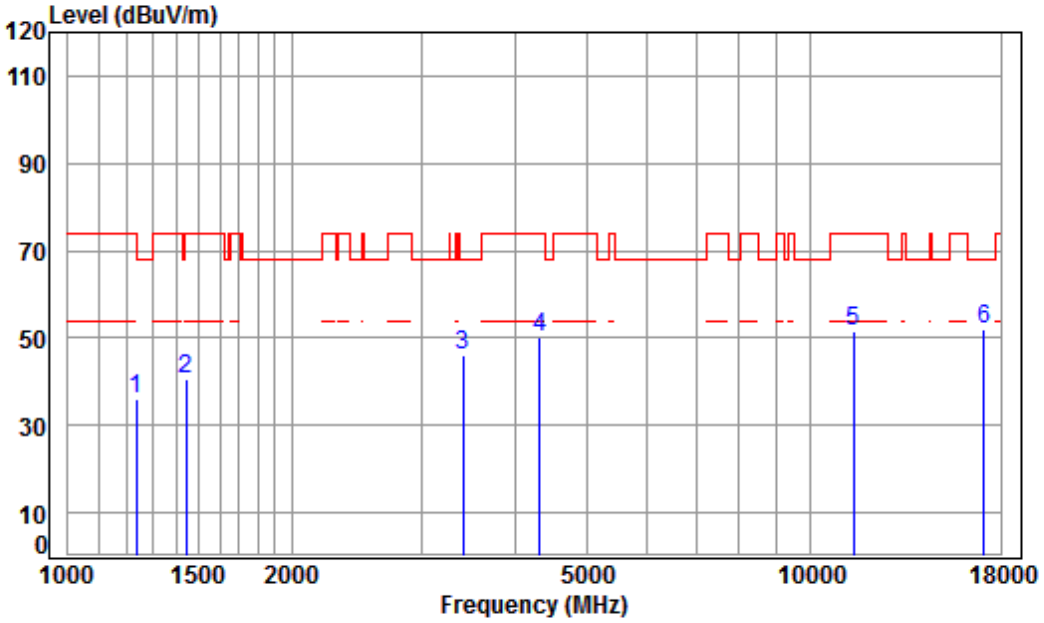
Mode:e; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5580 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1234.909	4.55	24.65	38.07	45.51	36.64	74.00	-37.36	peak
2	1697.129	5.23	26.66	38.02	46.04	39.91	74.00	-34.09	peak
3	3495.691	6.46	32.19	37.95	46.58	47.28	68.20	-20.92	peak
4	4482.150	7.54	33.60	38.26	48.11	50.99	68.20	-17.21	peak
5	11160.000	11.80	37.83	35.60	37.40	51.43	74.00	-22.57	peak
6	pp16740.000	15.57	42.75	36.68	30.17	51.81	68.20	-16.39	peak

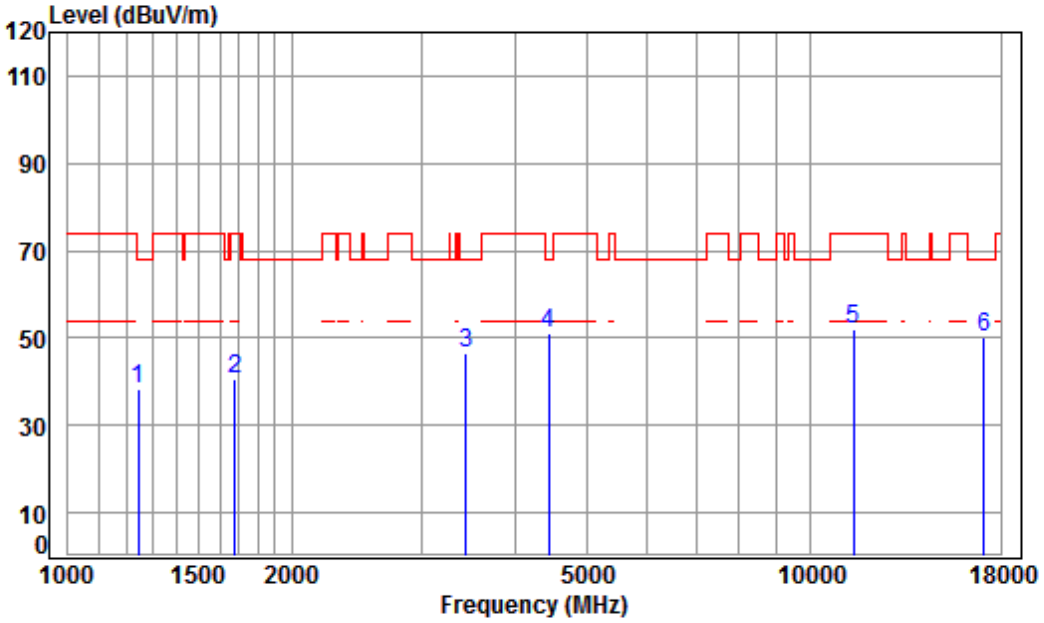
Mode:e; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5700 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1234.909	4.55	24.65	38.07	45.09	36.22	74.00	-37.78	peak
2	1443.509	5.30	25.57	38.05	47.64	40.46	74.00	-33.54	peak
3	3405.929	6.38	32.04	37.94	45.51	45.99	68.20	-22.21	peak
4	4316.859	7.36	33.60	38.17	47.33	50.12	74.00	-23.88	peak
5	11400.000	12.04	38.02	35.89	37.23	51.40	74.00	-22.60	peak
6	pp17100.000	16.49	42.92	36.25	28.65	51.81	68.20	-16.39	peak

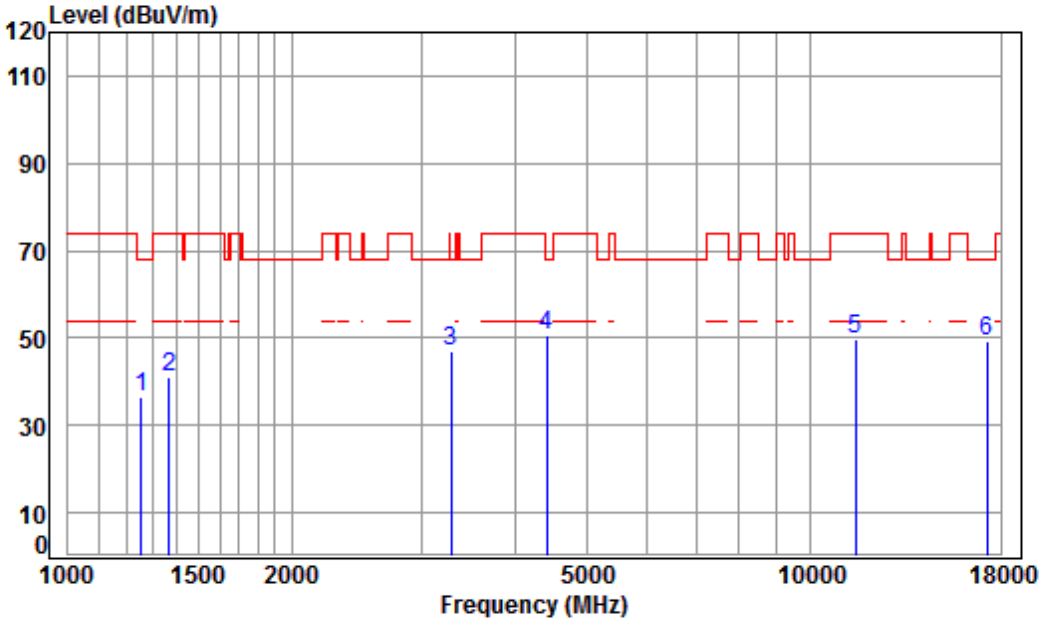
Mode:e; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5700 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1245.663	4.60	24.70	38.07	47.09	38.32	68.20	-29.88	peak
2	1677.621	5.25	26.58	38.03	46.72	40.52	74.00	-33.48	peak
3	3435.590	6.40	32.09	37.95	45.99	46.53	68.20	-21.67	peak
4 pp	4430.628	7.48	33.60	38.23	48.29	51.14	68.20	-17.06	peak
5	11400.000	12.04	38.02	35.89	38.00	52.17	74.00	-21.83	peak
6	17100.000	16.49	42.92	36.25	26.95	50.11	68.20	-18.09	peak

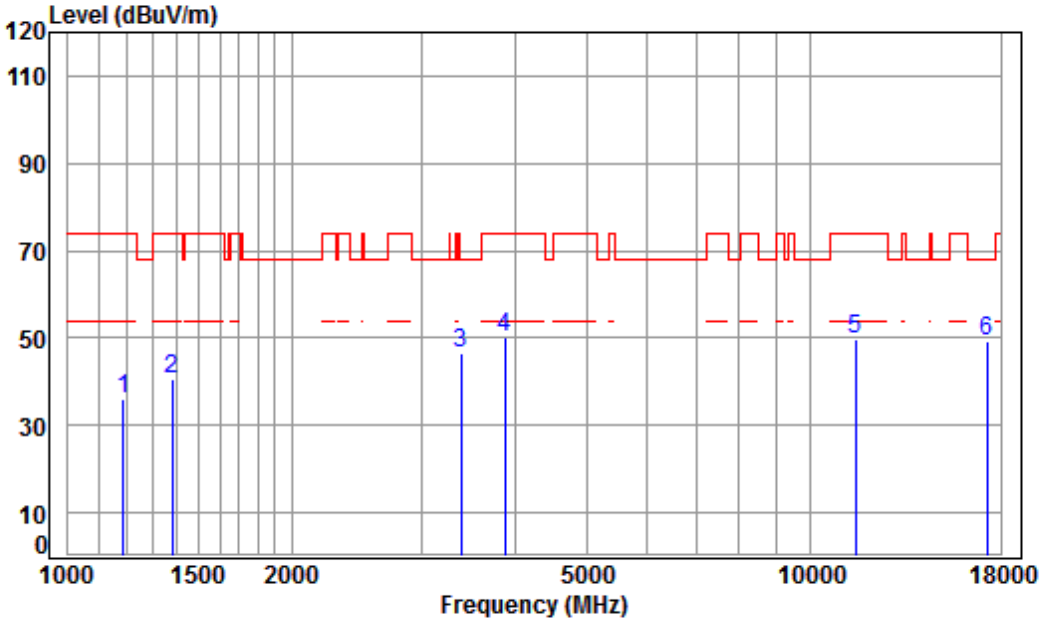
Mode:f; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5745 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1256.512	4.64	24.75	38.07	45.23	36.55	68.20	-31.65	peak
2	1370.328	5.05	25.26	38.05	48.82	41.08	74.00	-32.92	peak
3	3280.326	6.26	31.82	37.93	46.78	46.93	68.20	-21.27	peak
4 pp	4405.090	7.46	33.60	38.22	47.97	50.81	68.20	-17.39	peak
5	11490.000	12.13	38.09	36.00	35.59	49.81	74.00	-24.19	peak
6	17235.000	16.18	43.08	36.18	26.39	49.47	68.20	-18.73	peak

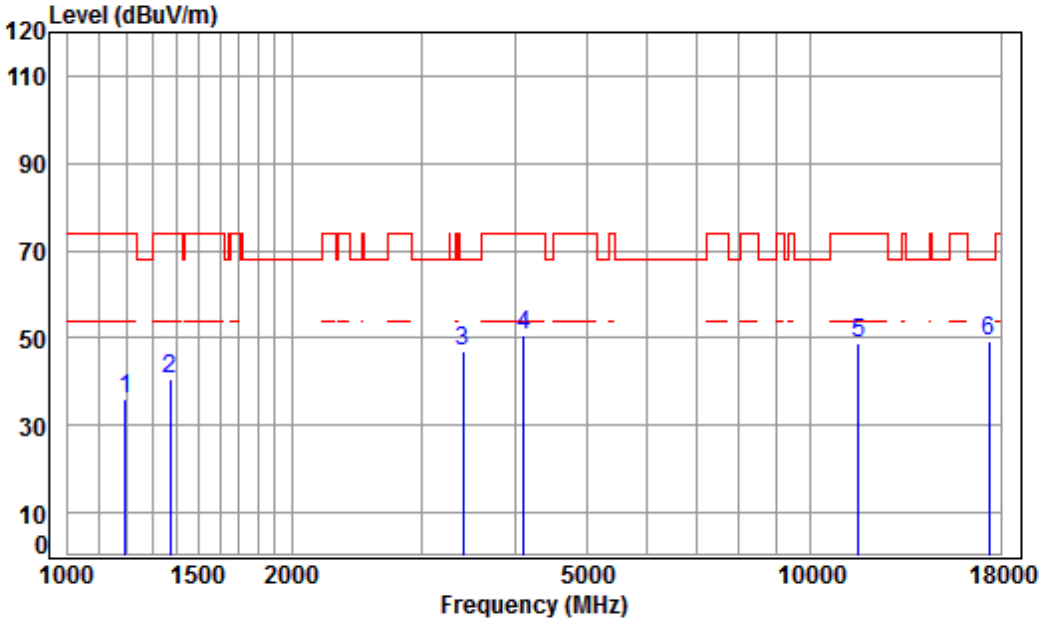
Mode:f; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5745 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1189.368	4.38	24.43	38.07	45.50	36.24	74.00	-37.76	peak
2	1382.262	5.09	25.32	38.05	48.07	40.43	74.00	-33.57	peak
3	3376.523	6.35	31.99	37.94	46.26	46.66	68.20	-21.54	peak
4	3867.831	6.85	33.25	37.99	47.90	50.01	74.00	-23.99	peak
5	11490.000	12.13	38.09	36.00	35.67	49.89	74.00	-24.11	peak
6	pp17235.000	16.18	43.08	36.18	26.17	49.25	68.20	-18.95	peak

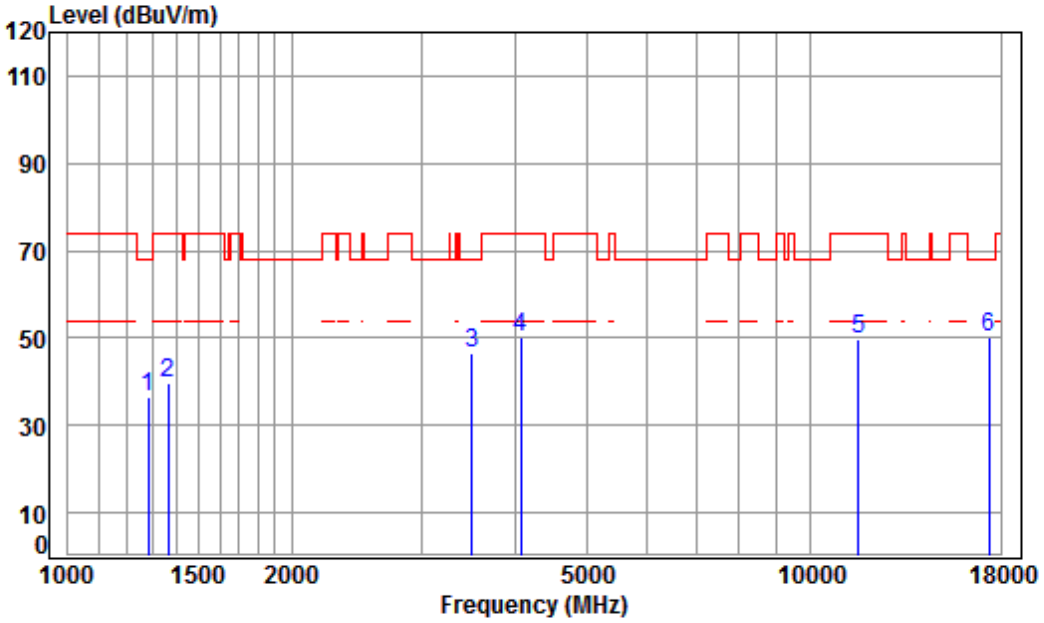
Mode:f; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5785 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1196.264	4.40	24.46	38.07	45.48	36.27	74.00	-37.73	peak
2	1374.295	5.06	25.28	38.05	48.33	40.62	74.00	-33.38	peak
3	3405.929	6.38	32.04	37.94	46.65	47.13	68.20	-21.07	peak
4	4109.872	7.11	33.60	38.06	48.21	50.86	74.00	-23.14	peak
5	11570.000	12.17	38.17	36.10	34.67	48.91	74.00	-25.09	peak
6	pp17355.000	15.92	43.23	36.12	26.35	49.38	68.20	-18.82	peak

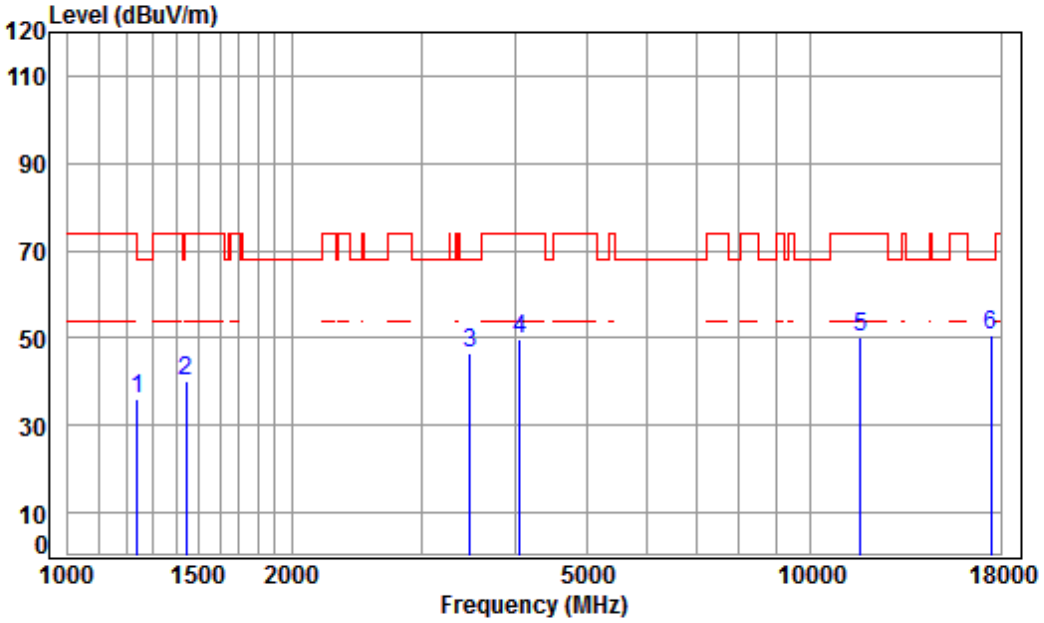
Mode:f; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5785 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1282.193	4.73	24.87	38.06	44.88	36.42	68.20	-31.78	peak
2	1366.374	5.04	25.25	38.05	47.51	39.75	74.00	-34.25	peak
3	3495.691	6.46	32.19	37.95	45.75	46.45	68.20	-21.75	peak
4	4074.388	7.07	33.60	38.04	47.51	50.14	74.00	-23.86	peak
5	11570.000	12.17	38.17	36.10	35.69	49.93	74.00	-24.07	peak
6	pp17355.000	15.92	43.23	36.12	27.15	50.18	68.20	-18.02	peak

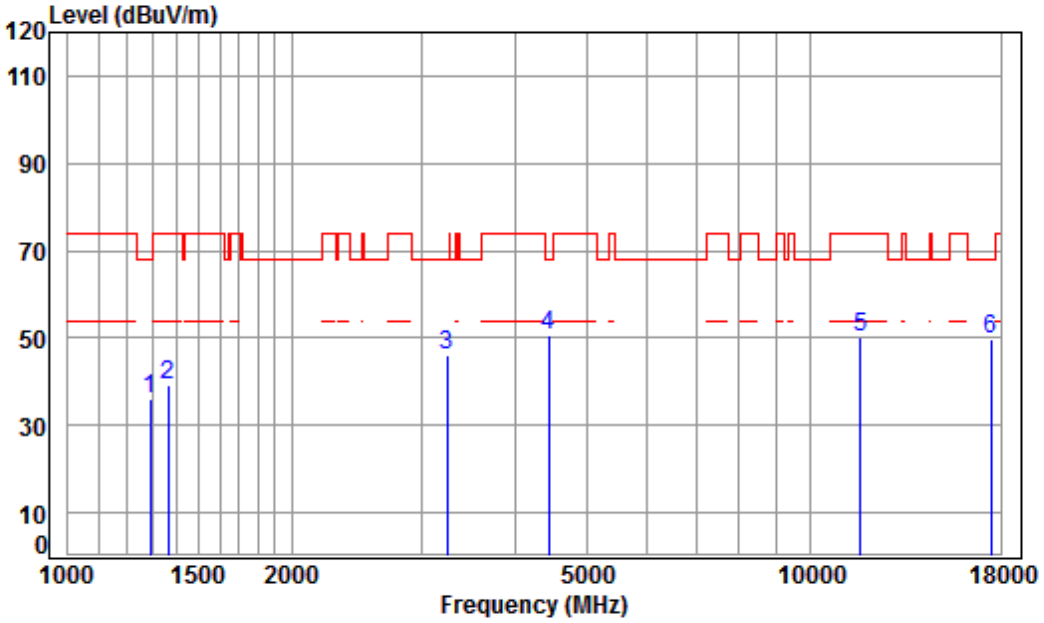
Mode:f; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5825 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1242.068	4.58	24.68	38.07	44.87	36.06	68.20	-32.14	peak
2	1443.509	5.30	25.57	38.05	47.43	40.25	74.00	-33.75	peak
3	3475.541	6.44	32.16	37.95	45.92	46.57	68.20	-21.63	peak
4	4062.629	7.06	33.60	38.03	47.18	49.81	74.00	-24.19	peak
5	11650.000	12.20	38.25	36.19	35.85	50.11	74.00	-23.89	peak
6	pp17475.000	15.65	43.37	36.06	27.60	50.56	68.20	-17.64	peak

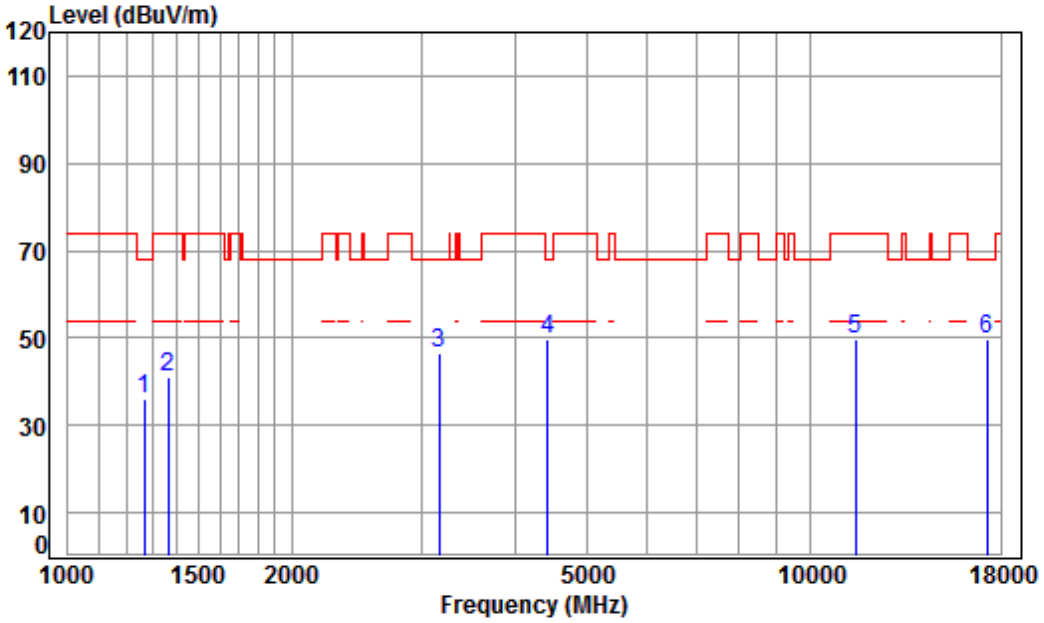
Mode:f; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5825 TX RSE
Note : 5G WIFI 11A

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1289.627	4.76	24.91	38.06	44.66	36.27	68.20	-31.93	peak
2	1366.374	5.04	25.25	38.05	47.21	39.45	74.00	-34.55	peak
3	3242.619	6.22	31.75	37.93	46.04	46.08	68.20	-22.12	peak
4 pp	4443.453	7.50	33.60	38.24	47.68	50.54	68.20	-17.66	peak
5	11650.000	12.20	38.25	36.19	35.88	50.14	74.00	-23.86	peak
6	17475.000	15.65	43.37	36.06	26.92	49.88	68.20	-18.32	peak

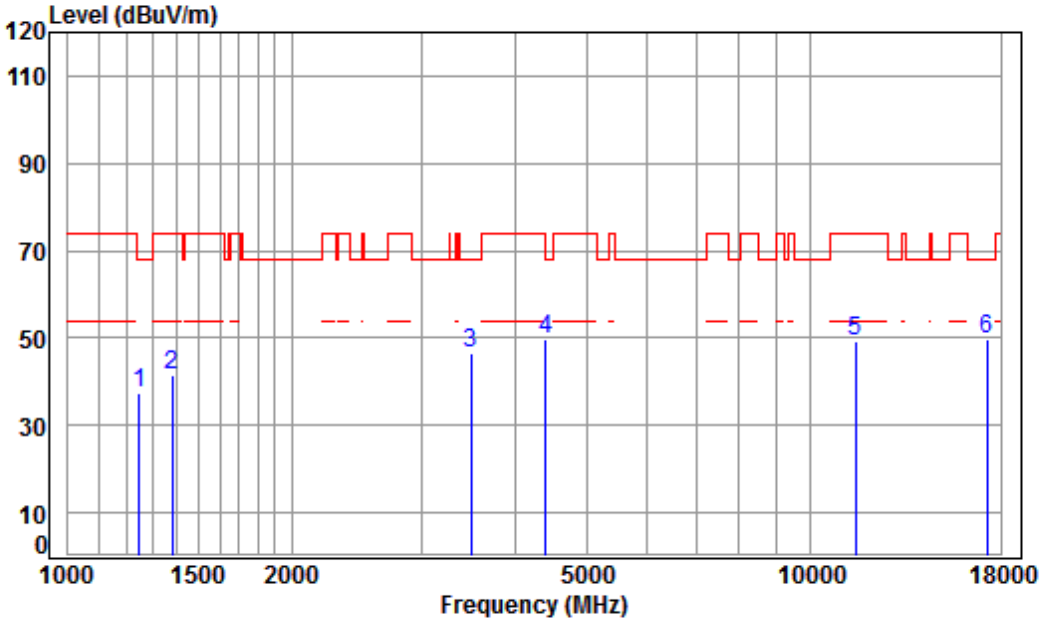
Mode:f; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5745 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1267.454	4.68	24.80	38.07	44.83	36.24	68.20	-31.96	peak
2	1366.374	5.04	25.25	38.05	48.65	40.89	74.00	-33.11	peak
3	3159.355	6.14	31.60	37.92	46.77	46.59	68.20	-21.61	peak
4 pp	4417.841	7.47	33.60	38.22	46.90	49.75	68.20	-18.45	peak
5	11490.000	12.13	38.09	36.00	35.31	49.53	74.00	-24.47	peak
6	17235.000	16.18	43.08	36.18	26.52	49.60	68.20	-18.60	peak

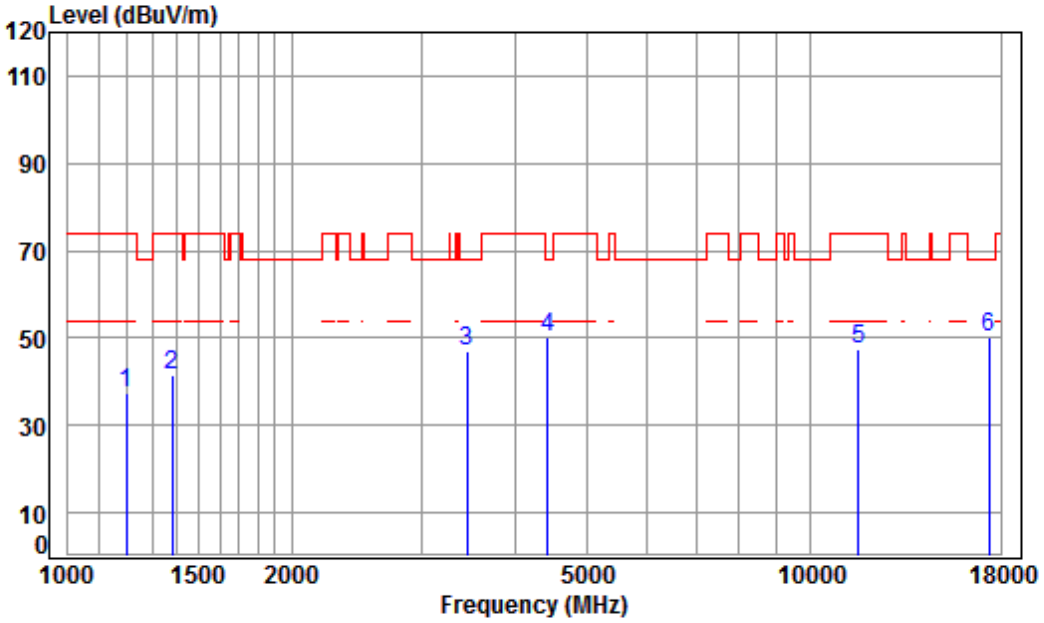
Mode:f; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5745 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1249.269	4.61	24.72	38.07	45.99	37.25	68.20	-30.95	peak
2	1382.262	5.09	25.32	38.05	49.18	41.54	74.00	-32.46	peak
3	3485.601	6.45	32.18	37.95	45.99	46.67	68.20	-21.53	peak
4	4392.376	7.44	33.60	38.21	47.11	49.94	74.00	-24.06	peak
5	11490.000	12.13	38.09	36.00	34.85	49.07	74.00	-24.93	peak
6	pp17235.000	16.18	43.08	36.18	26.71	49.79	68.20	-18.41	peak

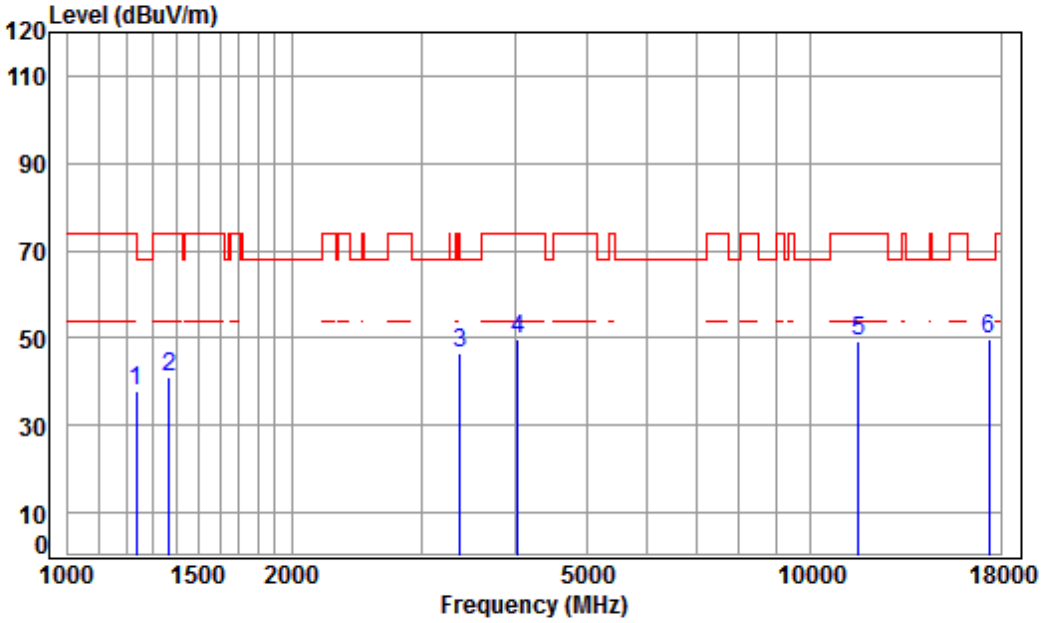
Mode:f; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:middle



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5785 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1199.726	4.42	24.48	38.07	46.40	37.23	74.00	-36.77	peak
2	1382.262	5.09	25.32	38.05	48.97	41.33	74.00	-32.67	peak
3	3445.535	6.41	32.11	37.95	46.29	46.86	68.20	-21.34	peak
4 pp	4417.841	7.47	33.60	38.22	47.53	50.38	68.20	-17.82	peak
5	11570.000	12.17	38.17	36.10	33.44	47.68	74.00	-26.32	peak
6	17355.000	15.92	43.23	36.12	26.99	50.02	68.20	-18.18	peak

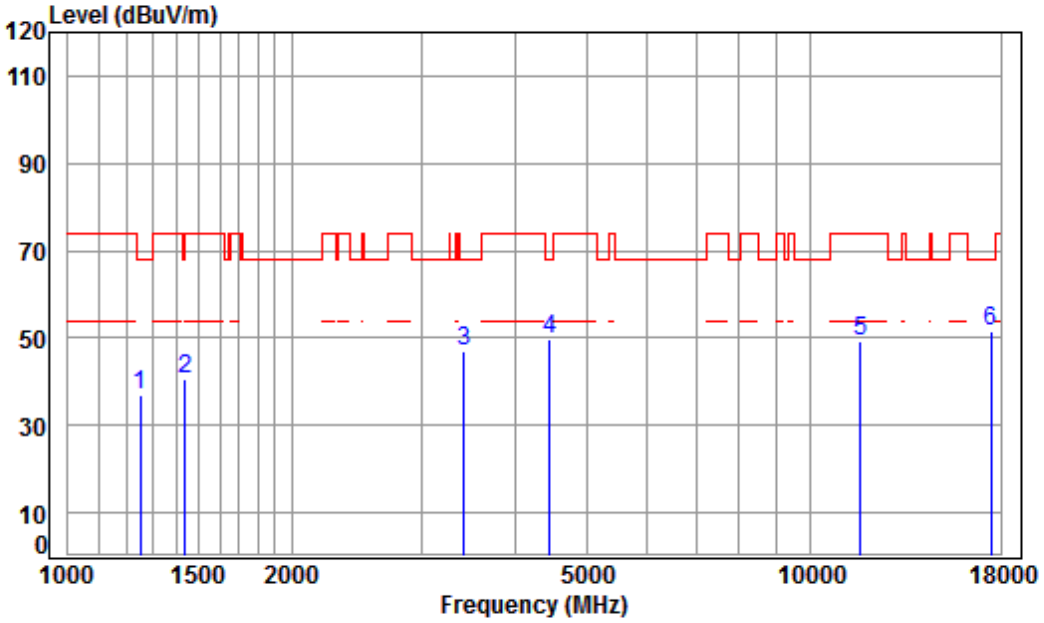
Mode:f; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:middle



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5785 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1234.909	4.55	24.65	38.07	46.93	38.06	74.00	-35.94	peak
2	1370.328	5.05	25.26	38.05	48.93	41.19	74.00	-32.81	peak
3	3366.778	6.34	31.97	37.94	46.33	46.70	68.20	-21.50	peak
4	4027.554	7.01	33.60	38.02	47.36	49.95	74.00	-24.05	peak
5	11570.000	12.17	38.17	36.10	35.03	49.27	74.00	-24.73	peak
6	pp17355.000	15.92	43.23	36.12	26.48	49.51	68.20	-18.69	peak

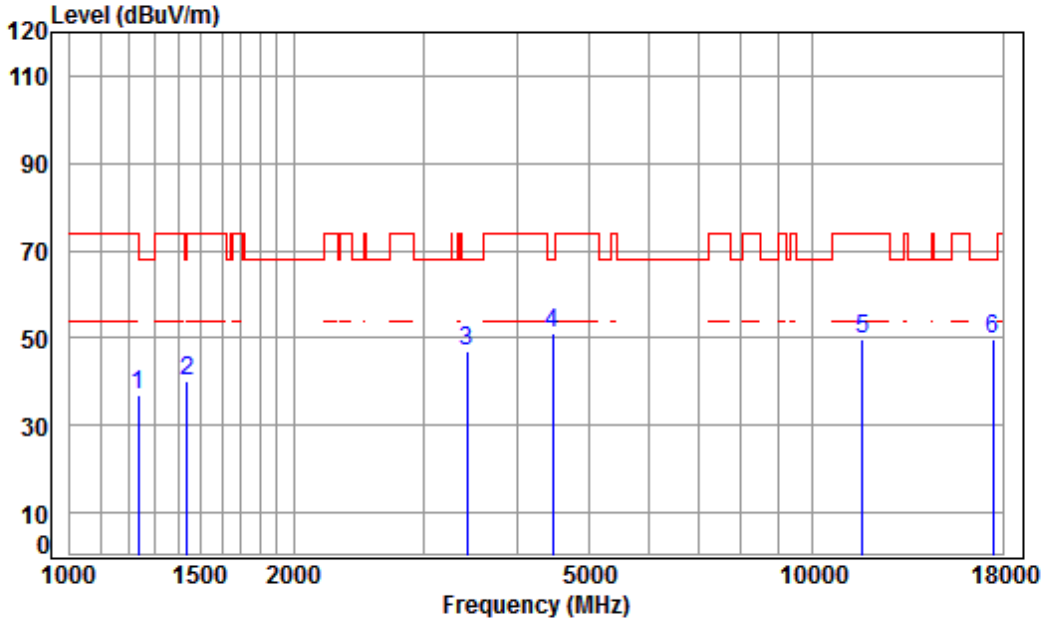
Mode:f; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5825 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1252.885	4.62	24.73	38.07	45.74	37.02	68.20	-31.18	peak
2	1439.343	5.28	25.56	38.05	47.87	40.66	74.00	-33.34	peak
3	3415.787	6.38	32.06	37.95	46.31	46.80	68.20	-21.40	peak
4	4456.315	7.51	33.60	38.24	46.71	49.58	68.20	-18.62	peak
5	11650.000	12.20	38.25	36.19	35.24	49.50	74.00	-24.50	peak
6	pp17475.000	15.65	43.37	36.06	28.66	51.62	68.20	-16.58	peak

Mode:f; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5825 TX RSE
Note : 5G WIFI 11N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	1234.909	4.55	24.65	38.07	45.76	36.89	74.00	-37.11	peak
2	1439.343	5.28	25.56	38.05	47.26	40.05	74.00	-33.95	peak
3	3425.675	6.39	32.07	37.95	46.51	47.02	68.20	-21.18	peak
4 pp	4469.214	7.53	33.60	38.25	48.18	51.06	68.20	-17.14	peak
5	11650.000	12.20	38.25	36.19	35.63	49.89	74.00	-24.11	peak
6	17475.000	15.65	43.37	36.06	26.84	49.80	68.20	-18.40	peak

7.12 Radiated Emissions which fall in the restricted bands

Test Requirement 47 CFR Part 15, Subpart C 15.209 & 15.407(b)
Test Method: KDB 789033 D02 II G
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.		

7.12.1 E.U.T. Operation

Operating Environment:

Temperature: 25.1 °C Humidity: 56.2 % RH Atmospheric Pressure: 1010 mbar

Pretest these modes to find the worst case:

c:TX mode (Band 1)_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 @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

d:TX mode (Band 2A)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

e:TX mode (Band 2C)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

The worst case for final test:

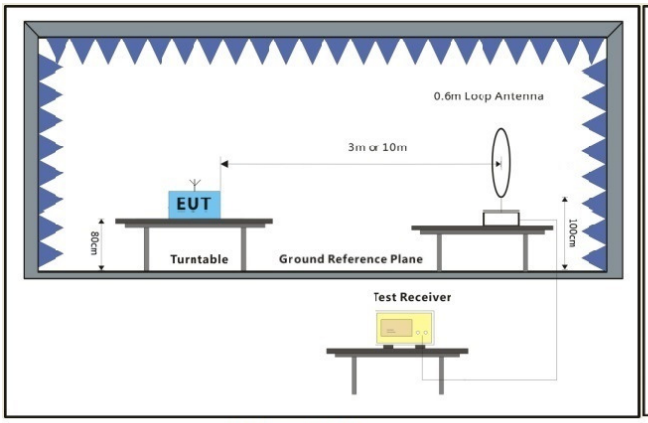
c:TX mode (Band 1)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

d:TX mode (Band 2A)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

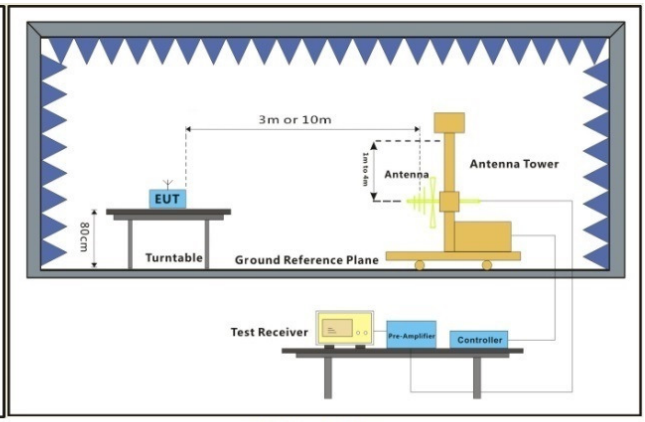
e:TX mode (Band 2C)_Keep the EUT in continuously transmitting mode with all modulation types. All data rates for each modulation type have been tested and found the data rate @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

f:TX mode (Band 3)_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 @ 6Mbps is the worst case of IEEE 802.11a; the data rate @ MCS0 is the worst case of IEEE 802.11n(HT20). Only the data of worst case is recorded in the report.

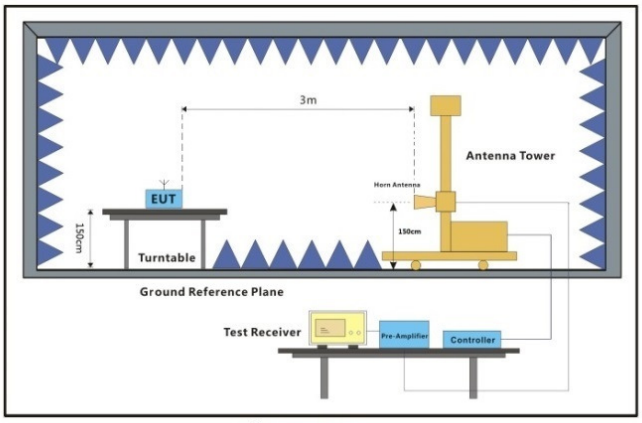
7.12.2 Test Setup Diagram



Below 30MHz



30MHz-1GHz



Above 1GHz

7.12.3 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.

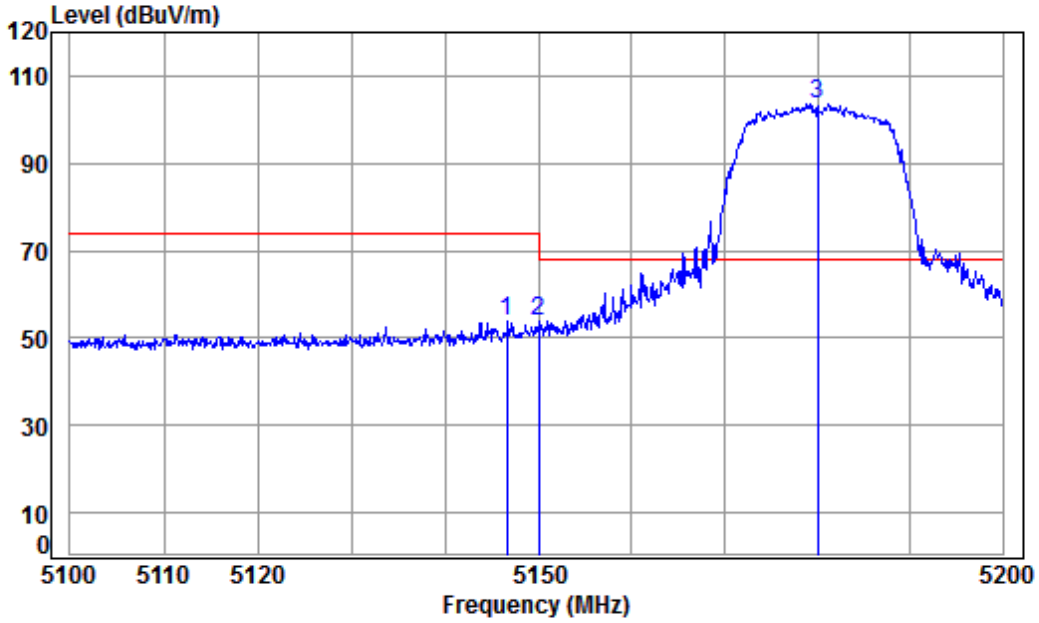
h. Test the EUT in the lowest channel, the middle channel, the Highest channel.

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

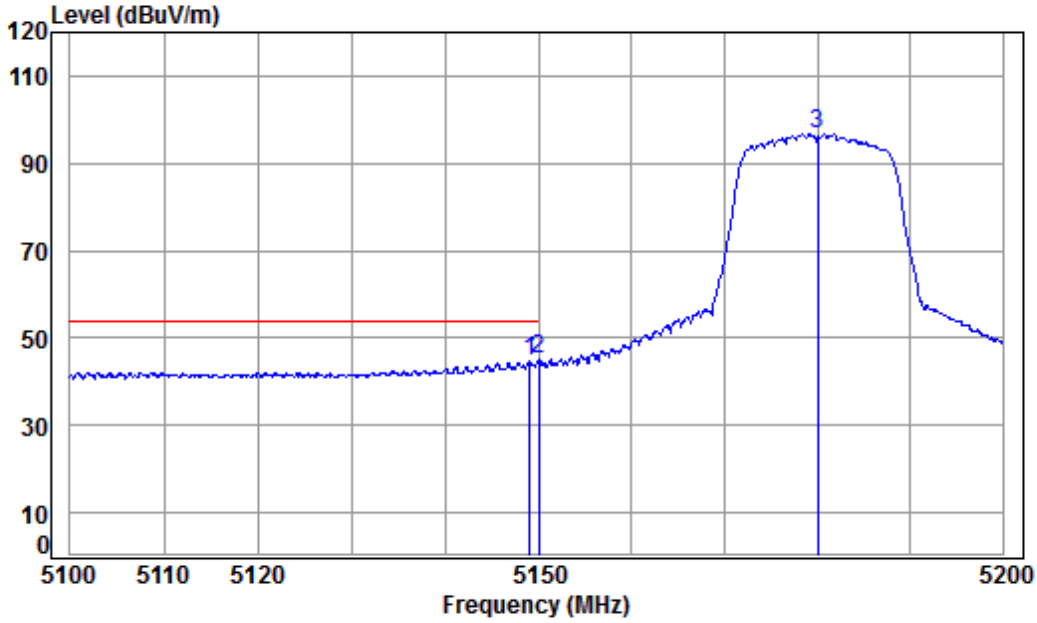
Mode:c; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5180 Band edge
: 5G WIFI 11A
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5146.658	8.32	34.32	42.36	53.59	53.87	74.00	-20.13	peak
2	5149.980	8.33	34.32	42.36	53.41	53.70	74.00	-20.30	peak
3 pp	5180.000	8.37	34.35	42.33	103.19	103.58	68.20	35.38	peak

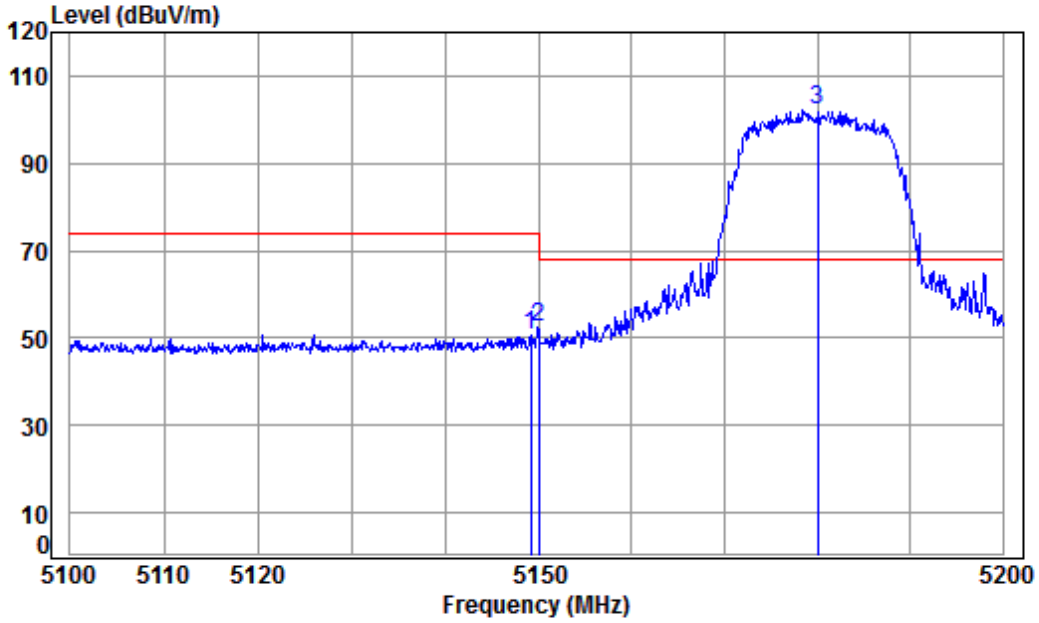
Mode:c; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5180 Band edge
: 5G WIFI 11A
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5149.057	8.32	34.32	42.36	44.46	44.74	54.00	-9.26	Average
2 pp	5149.980	8.33	34.32	42.36	44.69	44.98	54.00	-9.02	Average
3	5180.000	8.37	34.35	42.33	96.28	96.67	------	------	Average

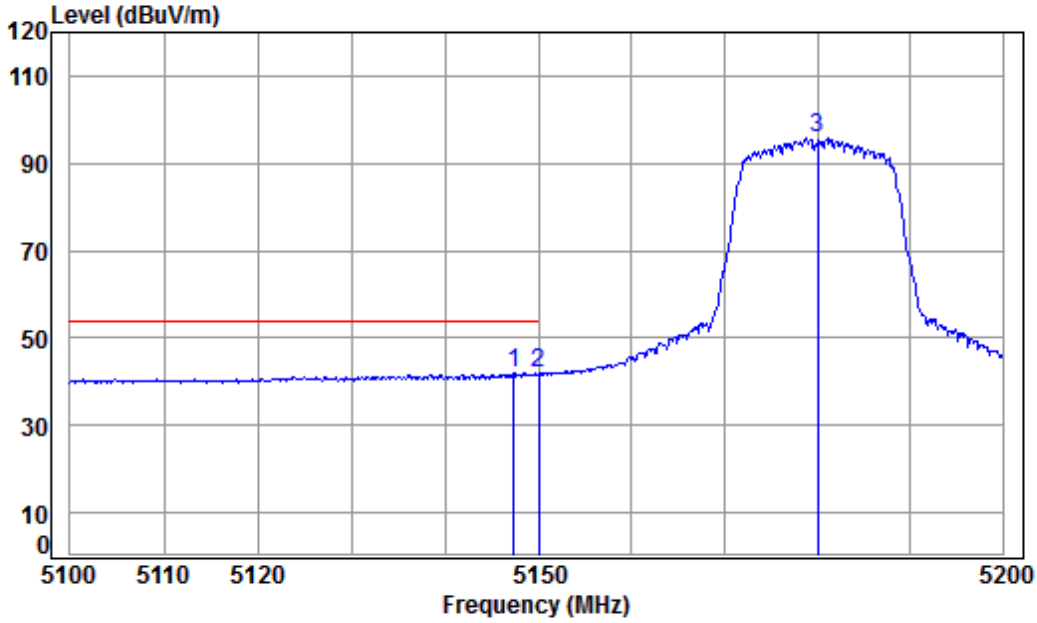
Mode:c; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5180 Band edge
: 5G WIFI 11A
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5149.157	8.32	34.32	42.36	50.52	50.80	74.00	-23.20	Peak
2	5149.980	8.33	34.32	42.36	52.04	52.33	74.00	-21.67	Peak
3 pp	5180.000	8.37	34.35	42.33	101.61	102.00	68.20	33.80	Peak

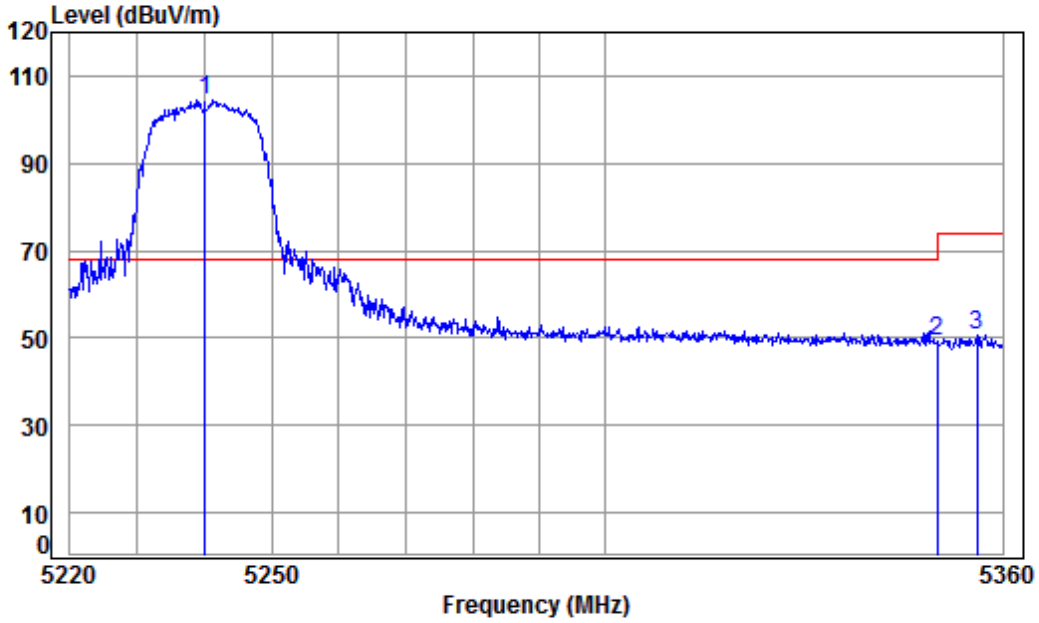
Mode:c; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5180 Band edge
: 5G WIFI 11A
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5147.358	8.32	34.32	42.36	41.55	41.83	54.00	-12.17	Average
2 pp	5149.980	8.33	34.32	42.36	41.64	41.93	54.00	-12.07	Average
3	5180.000	8.37	34.35	42.33	95.24	95.63	------	------	Average

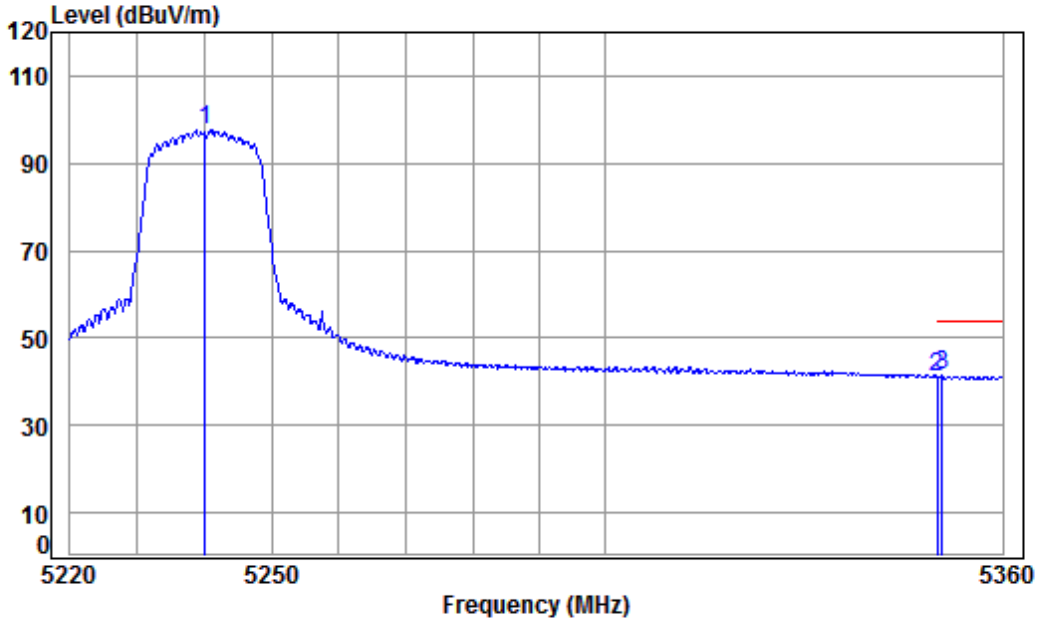
Mode:c; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5240 Band edge
: 5G WIFI 11A
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5240.000	8.46	34.40	42.27	104.00	104.59	68.20	36.39	peak
2	5350.020	8.63	34.48	42.17	48.34	49.28	74.00	-24.72	peak
3	5356.171	8.64	34.49	42.16	49.62	50.59	74.00	-23.41	peak

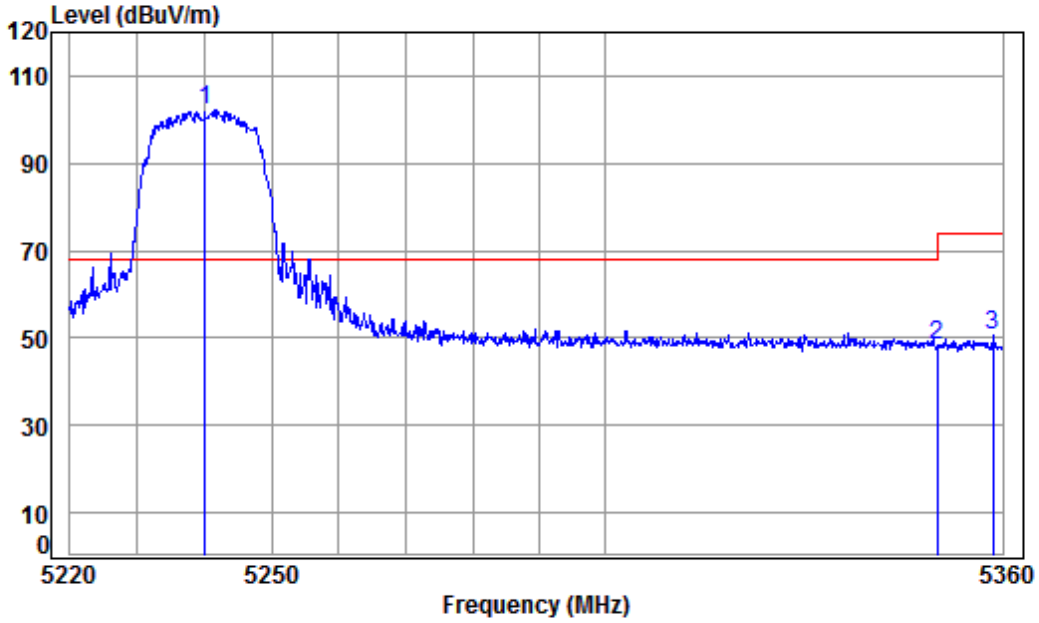
Mode:c; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5240 Band edge
: 5G WIFI 11A
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5240.000	8.46	34.40	42.27	96.93	97.52	------	------	Average
2	5350.020	8.63	34.48	42.17	39.97	40.91	54.00	-13.09	Average
3 pp	5350.787	8.63	34.48	42.17	40.38	41.32	54.00	-12.68	Average

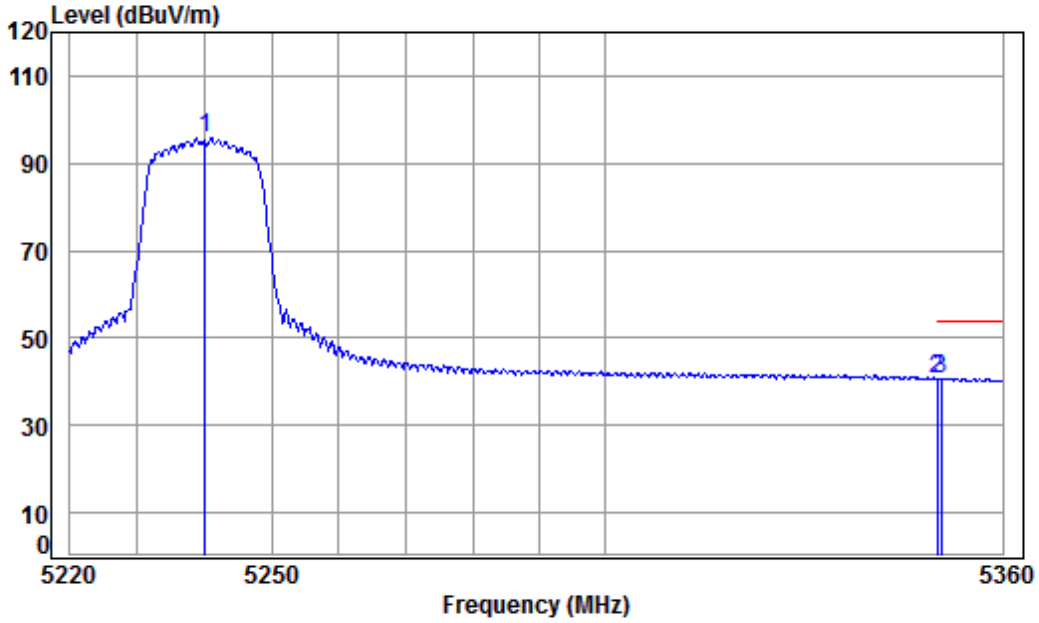
Mode:c; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5240 Band edge
: 5G WIFI 11A
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5240.000	8.46	34.40	42.27	101.59	102.18	68.20	33.98	Peak
2	5350.020	8.63	34.48	42.17	47.24	48.18	74.00	-25.82	Peak
3	5358.582	8.64	34.49	42.16	49.58	50.55	74.00	-23.45	Peak

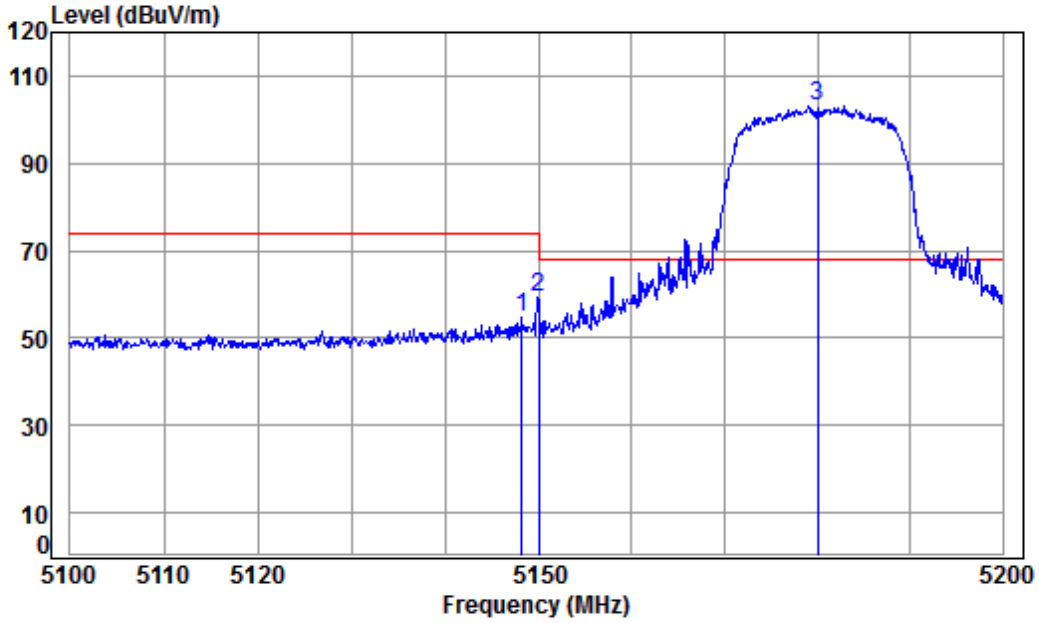
Mode:c; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5240 Band edge
: 5G WIFI 11A
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5240.000	8.46	34.40	42.27	95.14	95.73	------	------	Average
2 pp	5350.020	8.63	34.48	42.17	39.73	40.67	54.00	-13.33	Average
3	5350.646	8.63	34.48	42.17	39.71	40.65	54.00	-13.35	Average

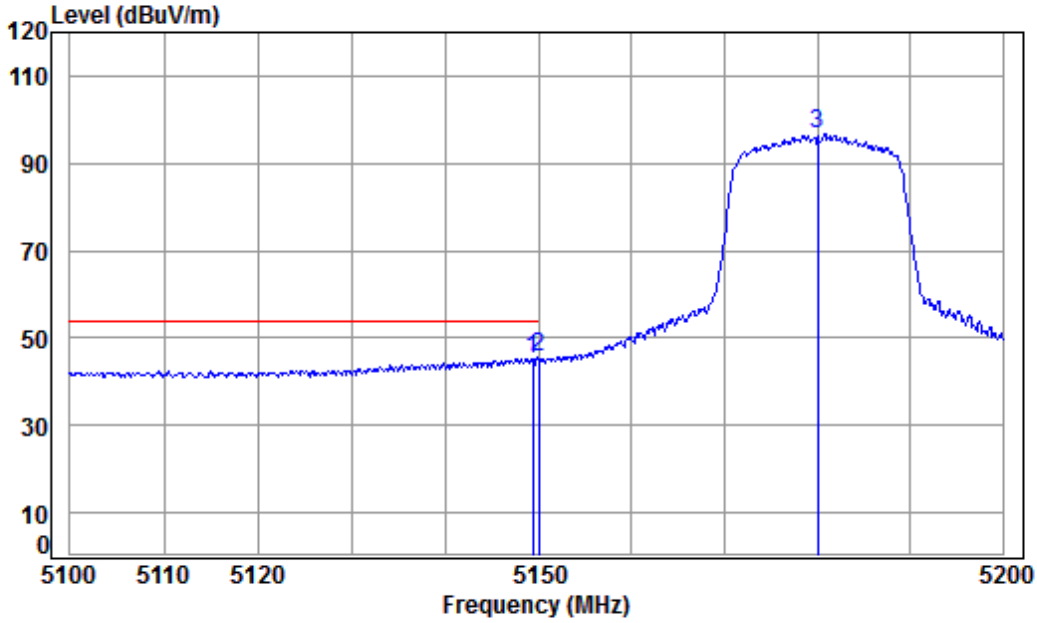
Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5180 Band edge
: 5G WIFI 11N20
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5148.158	8.32	34.32	42.36	54.54	54.82	74.00	-19.18	peak
2	5149.980	8.33	34.32	42.36	58.88	59.17	74.00	-14.83	peak
3 pp	5180.000	8.37	34.35	42.33	102.76	103.15	68.20	34.95	peak

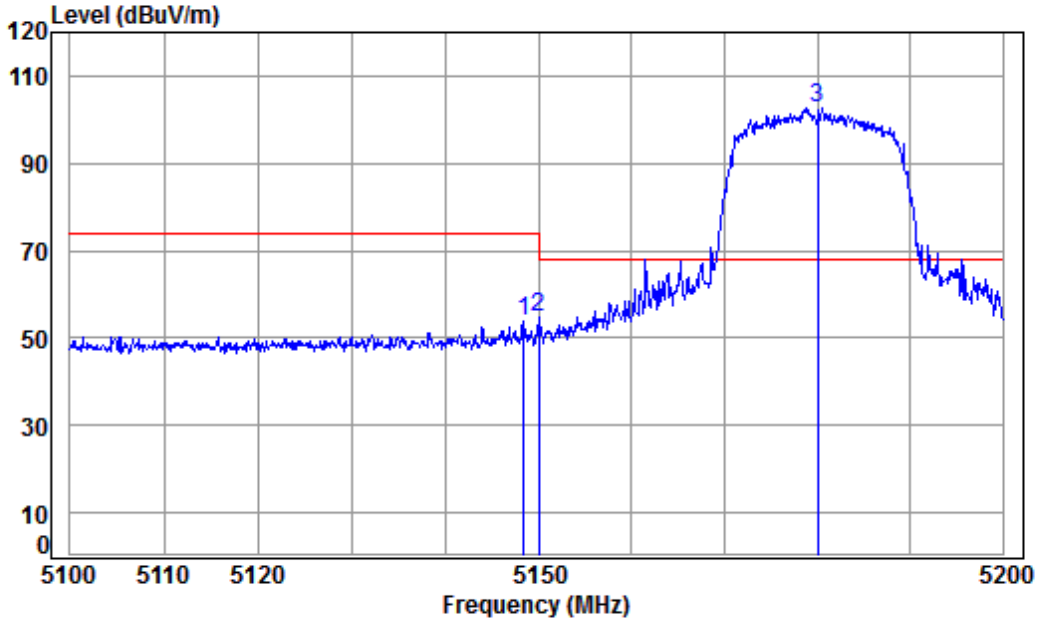
Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5180 Band edge
: 5G WIFI 11N20
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5149.357	8.32	34.32	42.36	44.90	45.18	54.00	-8.82	Average
2 pp	5149.980	8.33	34.32	42.36	45.16	45.45	54.00	-8.55	Average
3	5180.000	8.37	34.35	42.33	96.20	96.59	------	------	Average

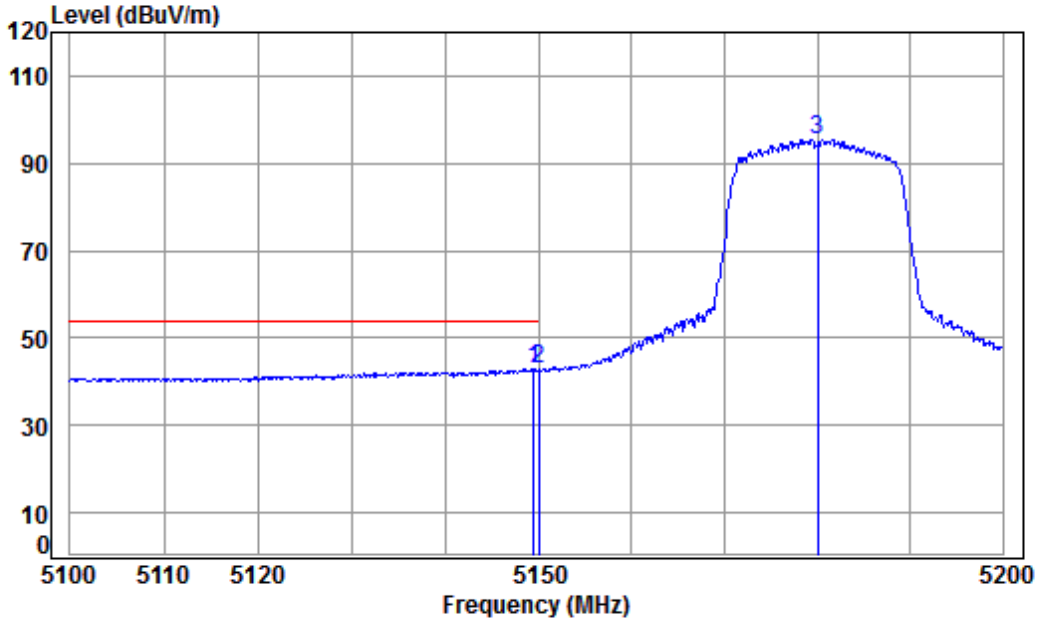
Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5180 Band edge
: 5G WIFI 11N20
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5148.458	8.32	34.32	42.36	53.53	53.81	74.00	-20.19	Peak
2	5149.980	8.33	34.32	42.36	54.54	54.83	74.00	-19.17	Peak
3 pp	5180.000	8.37	34.35	42.33	102.42	102.81	68.20	34.61	Peak

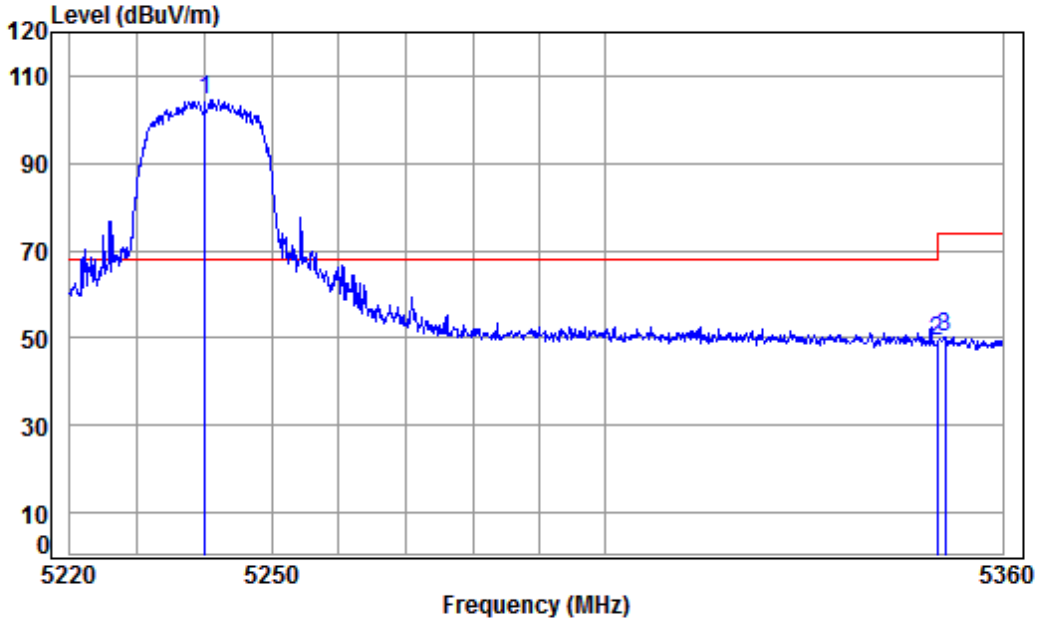
Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5180 Band edge
: 5G WIFI 11N20
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5149.458	8.32	34.32	42.36	42.52	42.80	54.00	-11.20	Average
2 pp	5149.980	8.33	34.32	42.36	42.60	42.89	54.00	-11.11	Average
3	5180.000	8.37	34.35	42.33	95.12	95.51	------	------	Average

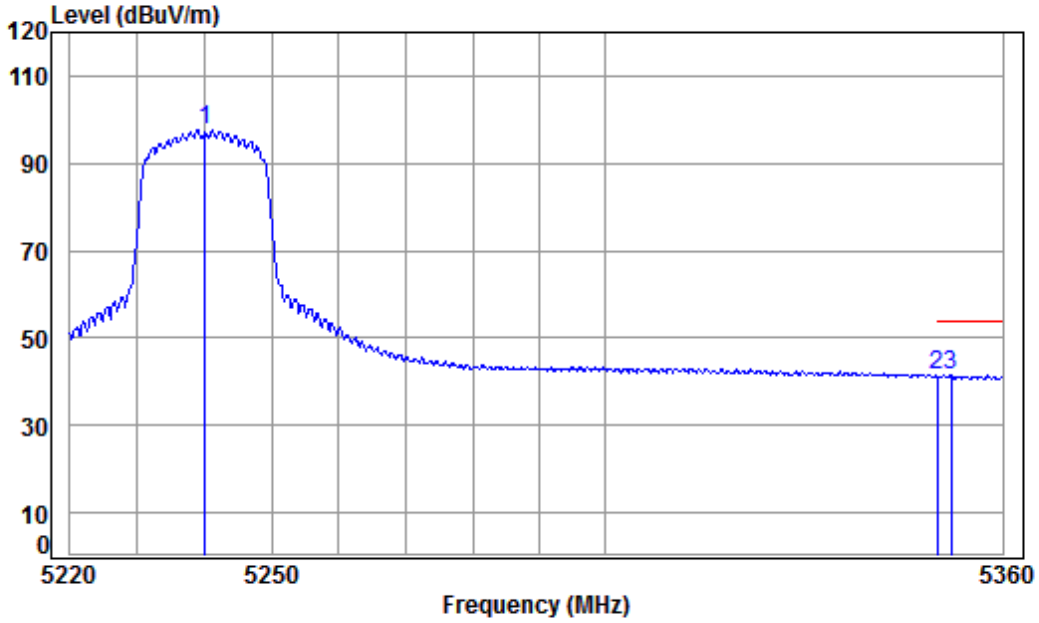
Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5240 Band edge
: 5G WIFI 11N20
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5240.000	8.46	34.40	42.27	103.96	104.55	68.20	36.35	peak
2	5350.020	8.63	34.48	42.17	48.30	49.24	74.00	-24.76	peak
3	5351.212	8.63	34.48	42.17	49.40	50.34	74.00	-23.66	peak

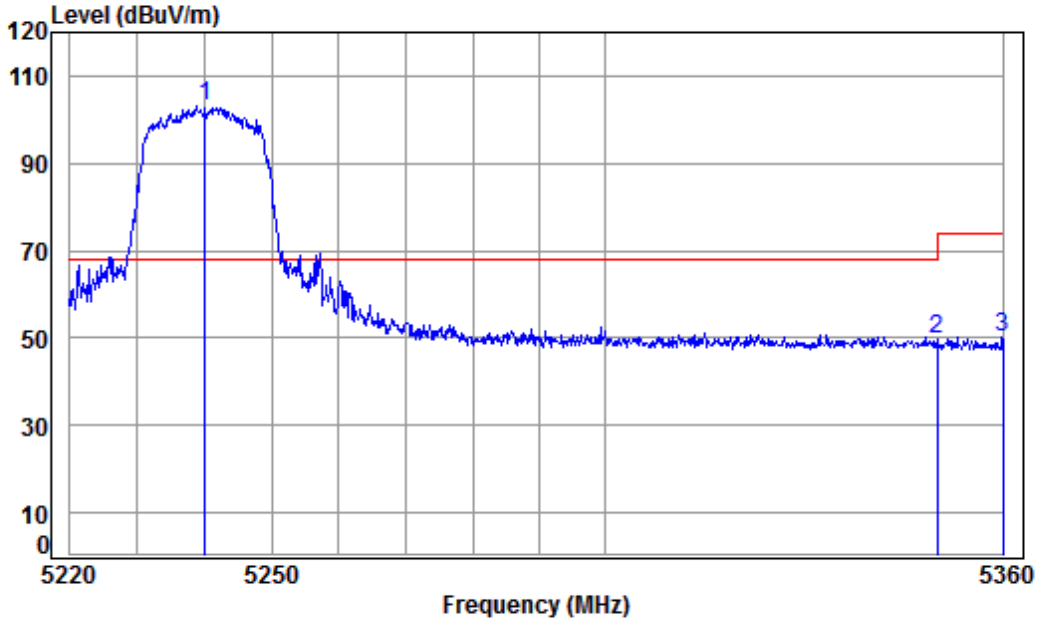
Mode:c; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5240 Band edge
: 5G WIFI 11N20
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5240.000	8.46	34.40	42.27	97.26	97.85	------	------	Average
2	5350.020	8.63	34.48	42.17	40.41	41.35	54.00	-12.65	Average
3 pp	5352.203	8.63	34.49	42.17	40.50	41.45	54.00	-12.55	Average

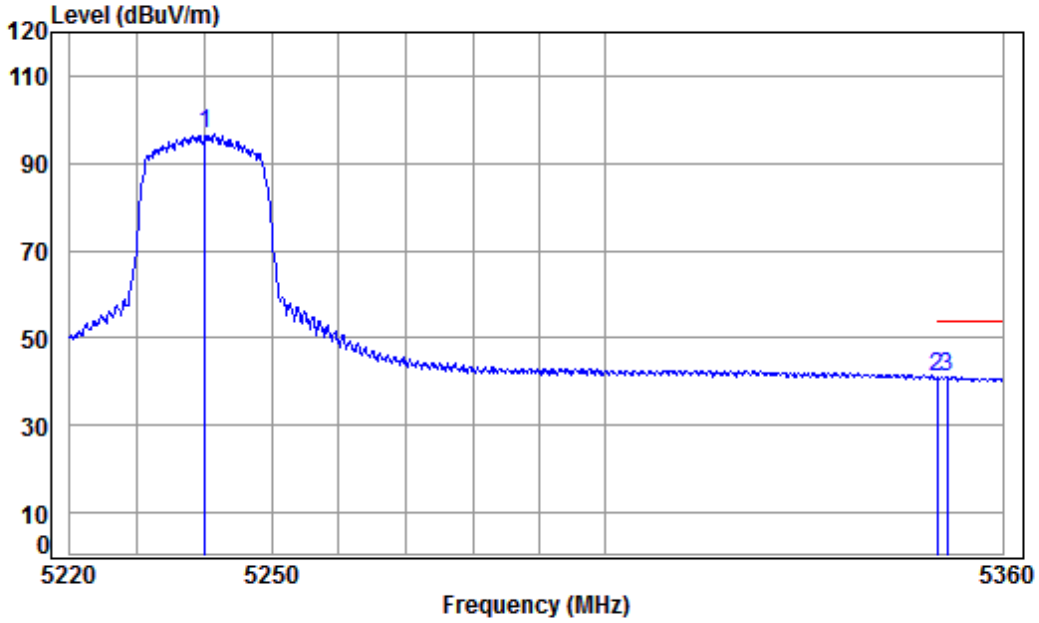
Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5240 Band edge
: 5G WIFI 11N20
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5240.000	8.46	34.40	42.27	102.43	103.02	68.20	34.82	Peak
2	5350.020	8.63	34.48	42.17	48.95	49.89	74.00	-24.11	Peak
3	5360.000	8.64	34.49	42.16	49.29	50.26	74.00	-23.74	Peak

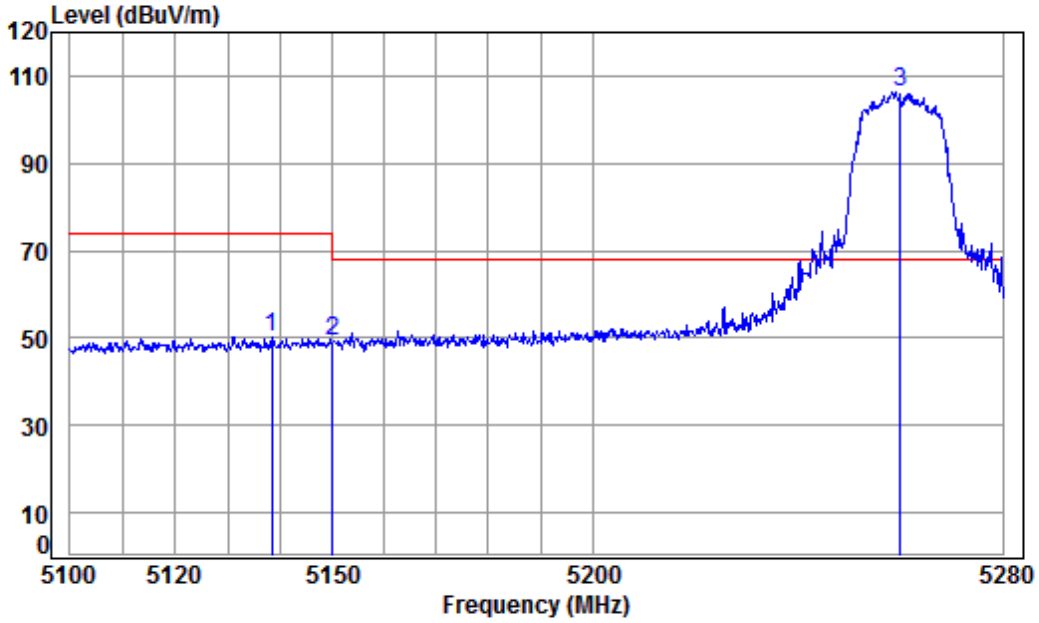
Mode:c; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5240 Band edge
: 5G WIFI 11N20
: Powersetting 15

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5240.000	8.46	34.40	42.27	96.07	96.66	------	------	Average
2	5350.020	8.63	34.48	42.17	40.02	40.96	54.00	-13.04	Average
3 pp	5351.495	8.63	34.49	42.17	40.21	41.16	54.00	-12.84	Average

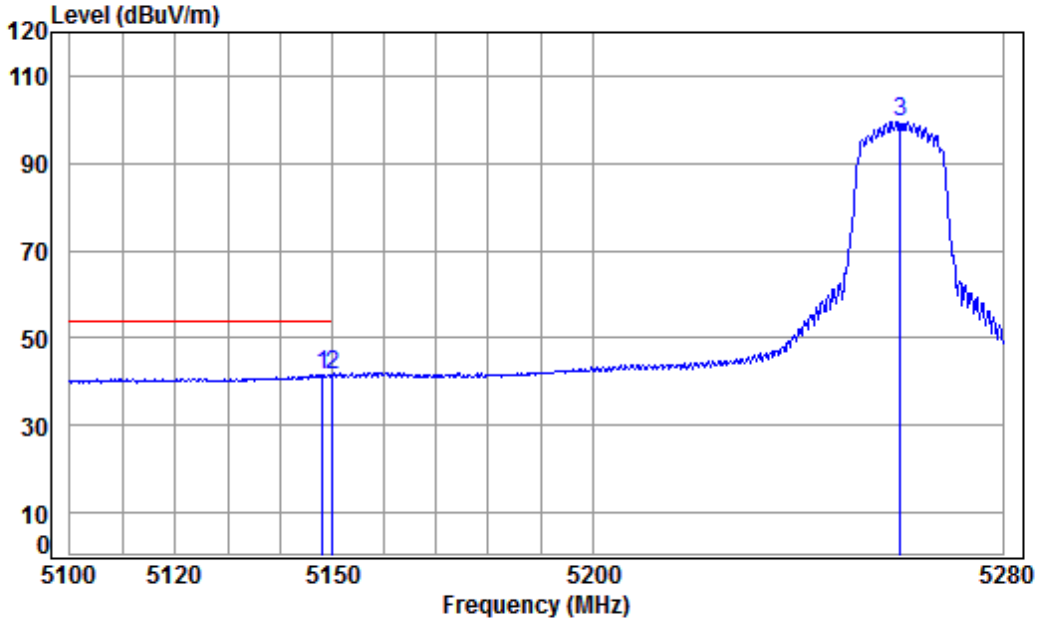
Mode:d; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5260 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5138.353	8.31	34.31	42.37	49.82	50.07	74.00	-23.93	peak
2	5149.980	8.33	34.32	42.36	49.06	49.35	74.00	-24.65	peak
3 pp	5260.000	8.49	34.41	42.25	105.84	106.49	68.20	38.29	peak

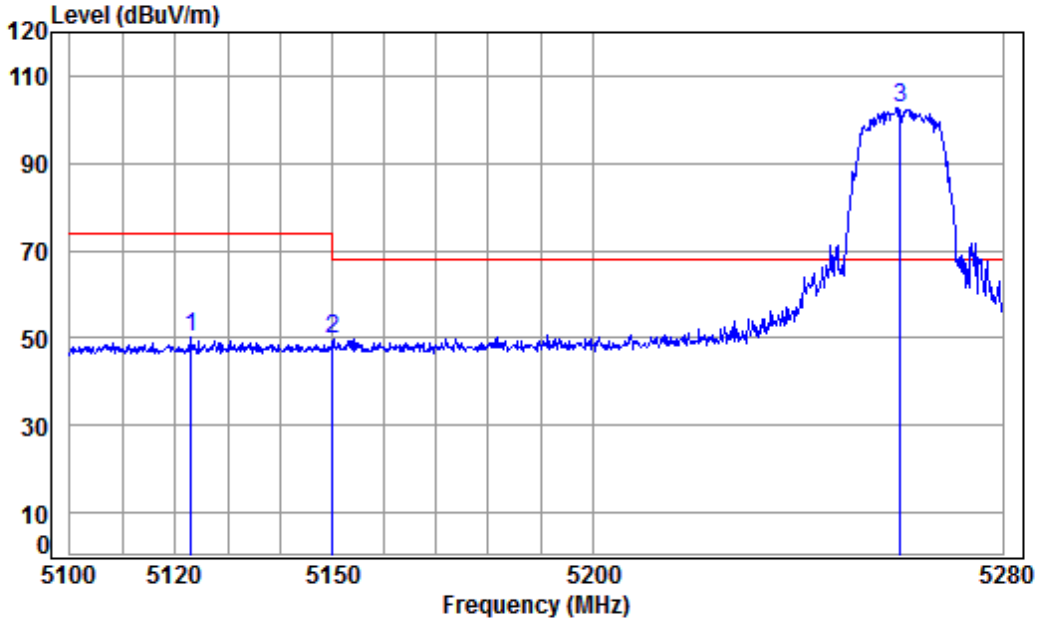
Mode:d; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5260 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5148.165	8.32	34.32	42.36	41.33	41.61	54.00	-12.39	Average
2 pp	5149.980	8.33	34.32	42.36	41.42	41.71	54.00	-12.29	Average
3	5260.000	8.49	34.41	42.25	99.04	99.69	------	------	Average

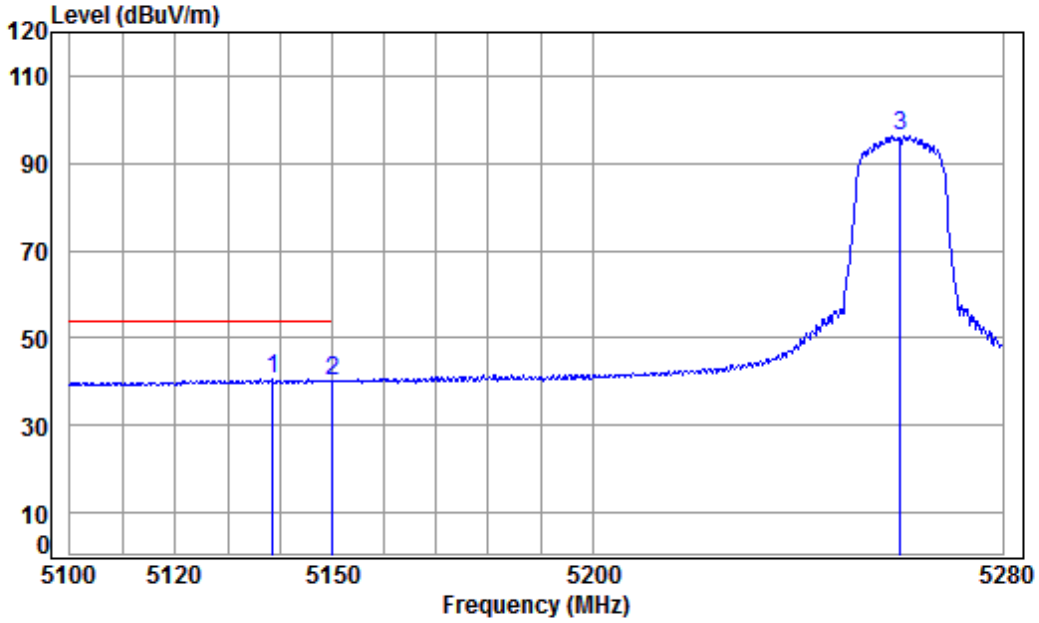
Mode:d; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5260 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5123.048	8.28	34.30	42.38	50.18	50.38	74.00	-23.62	Peak
2	5149.980	8.33	34.32	42.36	49.24	49.53	74.00	-24.47	Peak
3 pp	5260.000	8.49	34.41	42.25	102.08	102.73	68.20	34.53	Peak

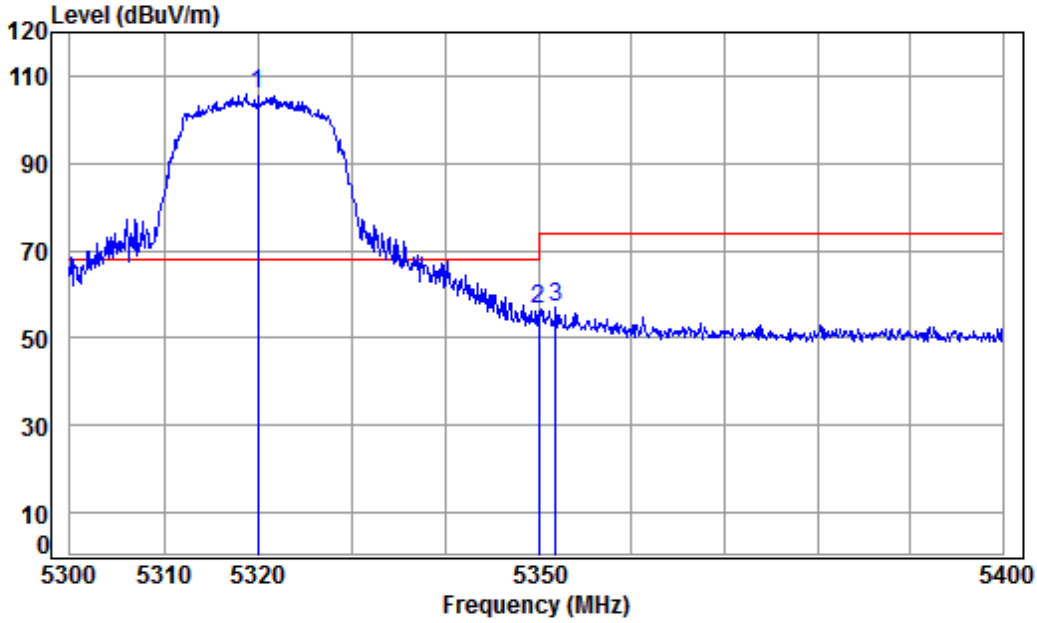
Mode:d; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5260 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5138.709	8.31	34.31	42.37	40.26	40.51	54.00	-13.49	Average
2	5149.980	8.33	34.32	42.36	40.01	40.30	54.00	-13.70	Average
3	5260.000	8.49	34.41	42.25	95.80	96.45	------	------	Average

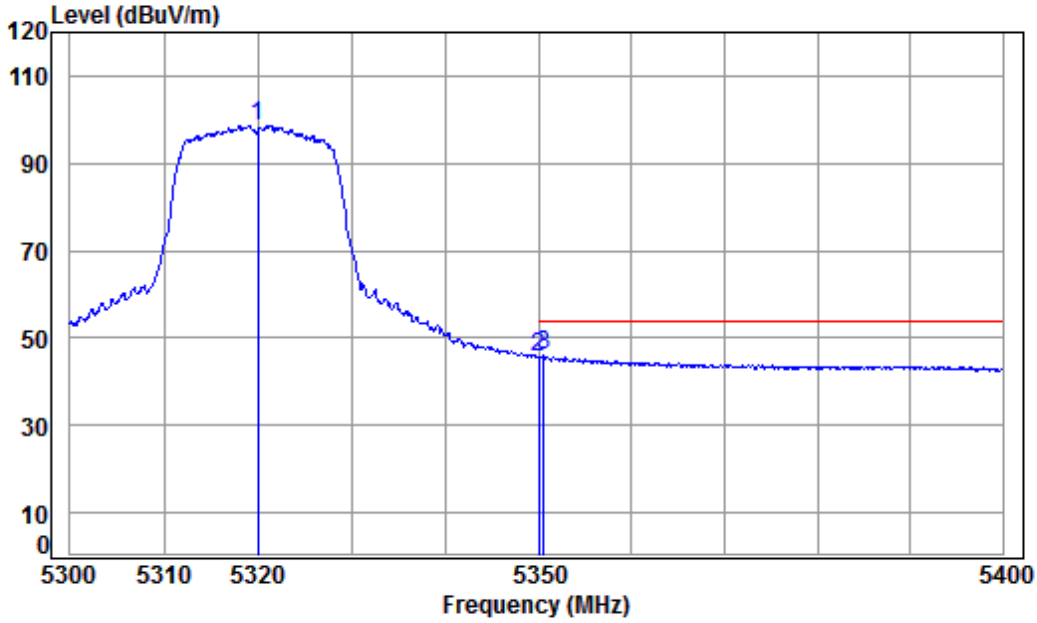
Mode:d; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5320 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5320.000	8.58	34.46	42.20	104.89	105.73	68.20	37.53	peak
2	5350.020	8.63	34.48	42.17	55.81	56.75	74.00	-17.25	peak
3	5351.867	8.63	34.49	42.17	55.95	56.90	74.00	-17.10	peak

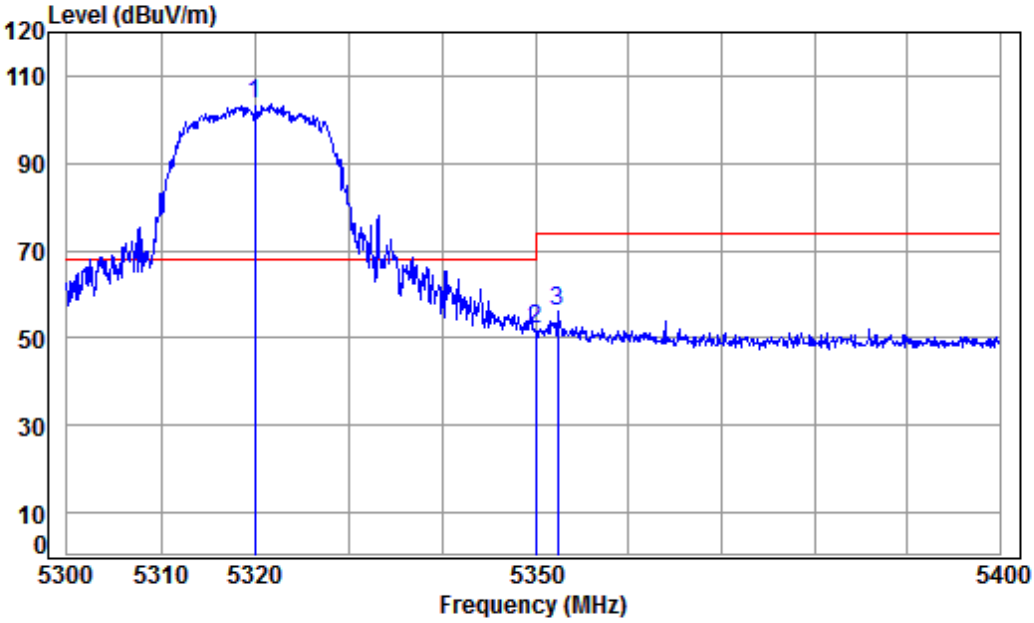
Mode:d; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5320 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5320.000	8.58	34.46	42.20	97.92	98.76	------	------	Average
2	5350.020	8.63	34.48	42.17	44.67	45.61	54.00	-8.39	Average
3 pp	5350.566	8.63	34.48	42.17	45.03	45.97	54.00	-8.03	Average

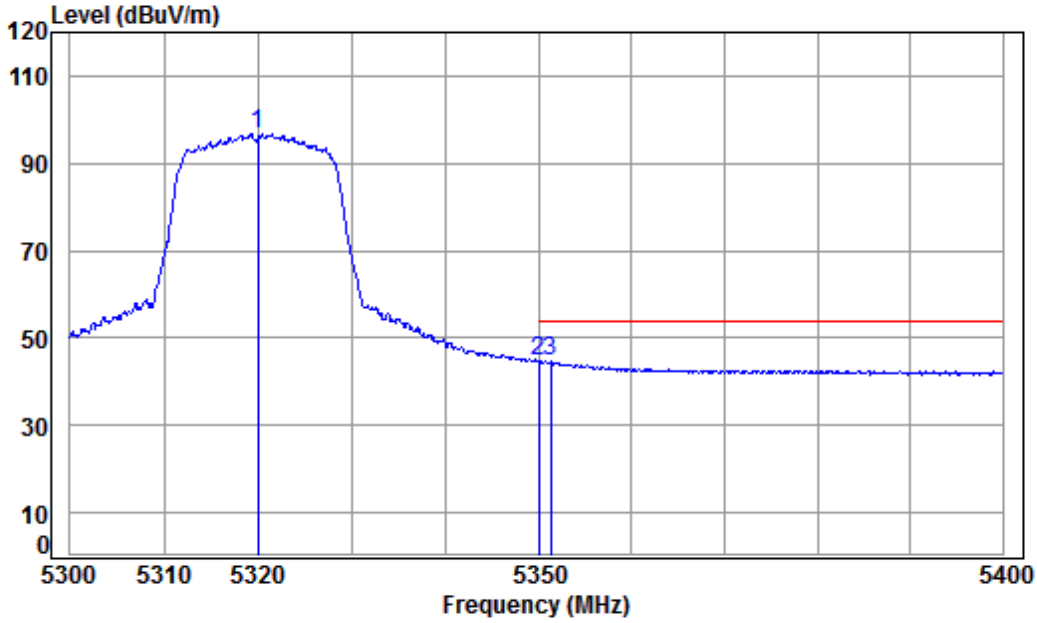
Mode:d; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5320 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5320.000	8.58	34.46	42.20	102.80	103.64	68.20	35.44	Peak
2	5350.020	8.63	34.48	42.17	50.97	51.91	74.00	-22.09	Peak
3	5352.367	8.63	34.49	42.17	55.02	55.97	74.00	-18.03	Peak

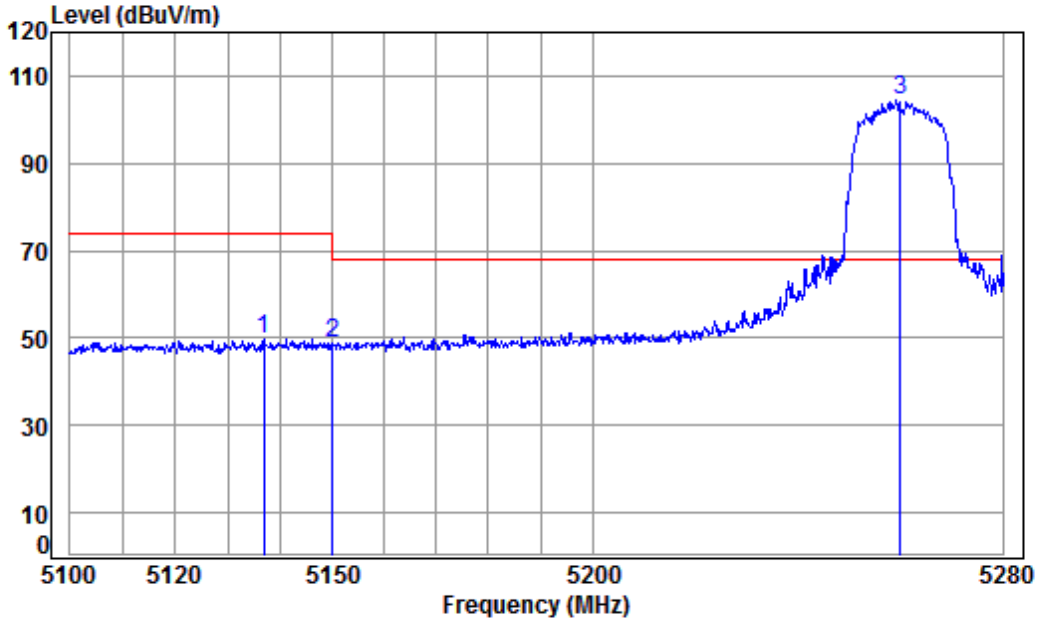
Mode:d; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5320 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5320.000	8.58	34.46	42.20	96.00	96.84	------	------	Average
2	5350.020	8.63	34.48	42.17	43.67	44.61	54.00	-9.39	Average
3 pp	5351.267	8.63	34.48	42.17	43.68	44.62	54.00	-9.38	Average

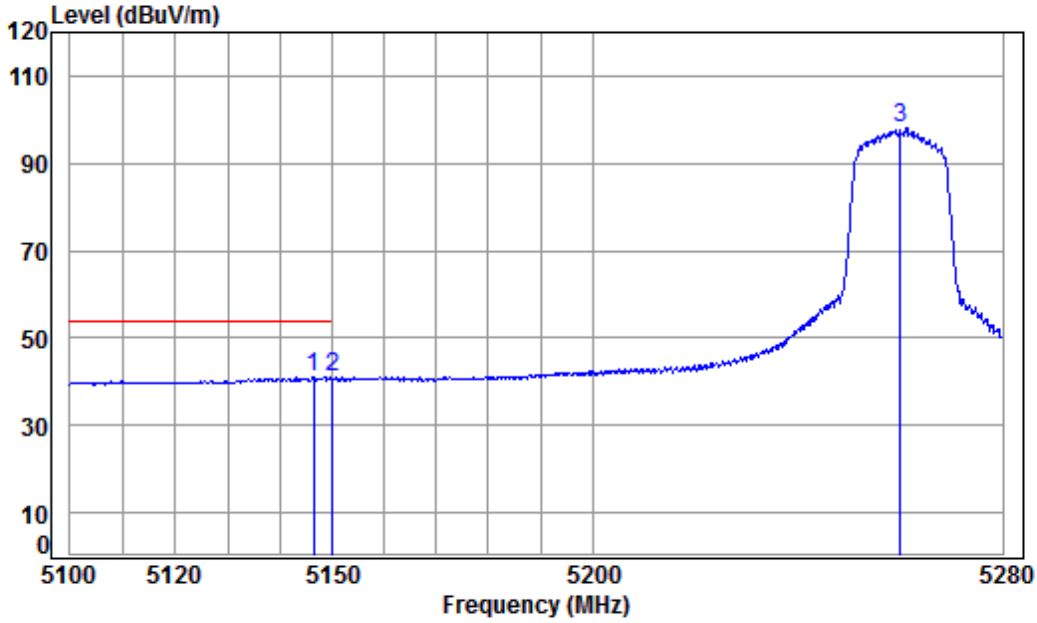
Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5260 Band edge
: 5G WIFI 11N20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5136.927	8.31	34.31	42.37	49.67	49.92	74.00	-24.08	peak
2	5149.980	8.33	34.32	42.36	48.62	48.91	74.00	-25.09	peak
3 pp	5260.000	8.49	34.41	42.25	103.70	104.35	68.20	36.15	peak

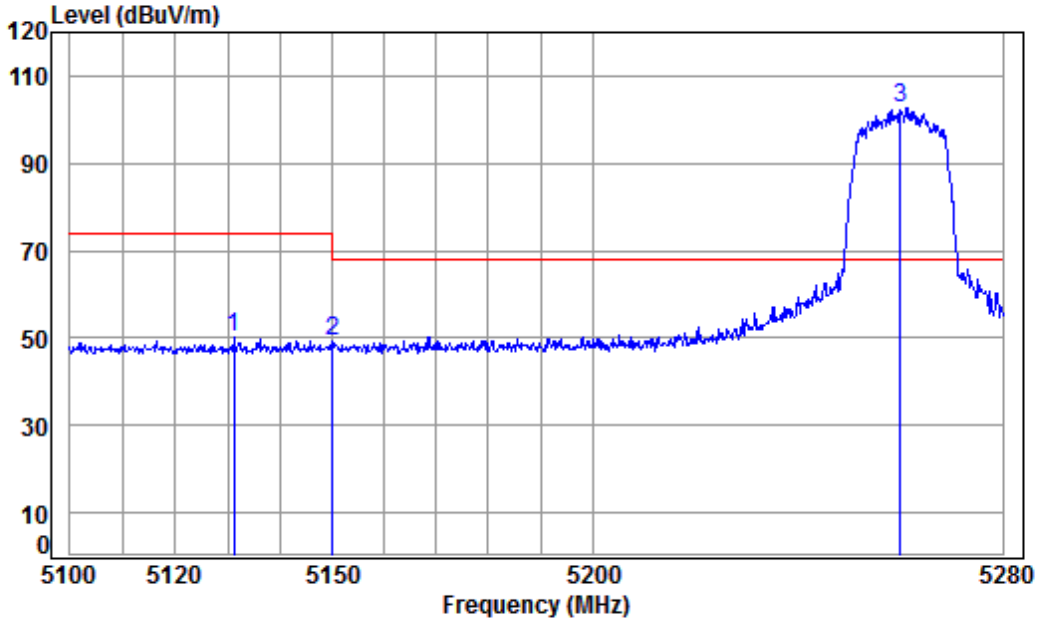
Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5260 Band edge
: 5G WIFI 11N20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5146.379	8.32	34.32	42.36	40.72	41.00	54.00	-13.00	Average
2 pp	5149.980	8.33	34.32	42.36	40.79	41.08	54.00	-12.92	Average
3	5260.000	8.49	34.41	42.25	97.23	97.88	------	------	Average

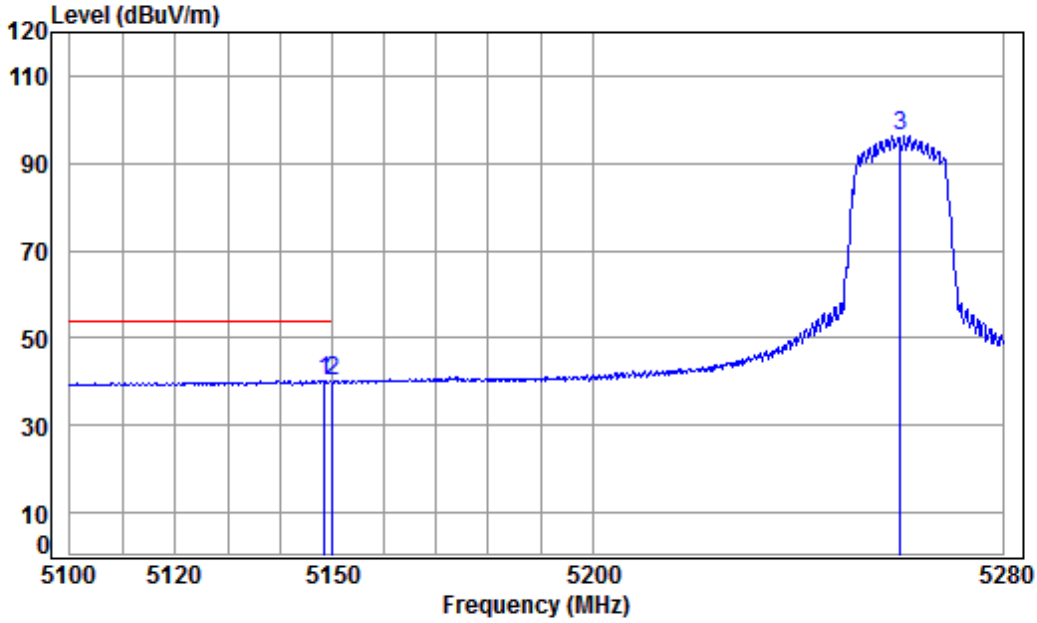
Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5260 Band edge
: 5G WIFI 11N20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5131.229	8.30	34.31	42.37	49.82	50.06	74.00	-23.94	Peak
2	5149.980	8.33	34.32	42.36	48.87	49.16	74.00	-24.84	Peak
3 pp	5260.000	8.49	34.41	42.25	102.13	102.78	68.20	34.58	Peak

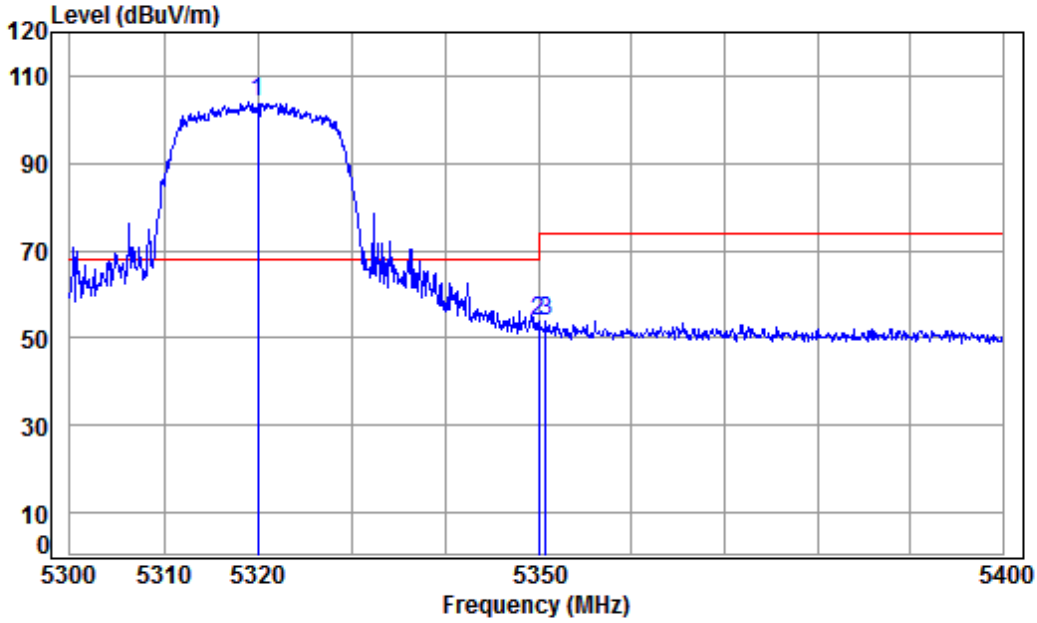
Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5260 Band edge
: 5G WIFI 11N20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5148.522	8.32	34.32	42.36	39.97	40.25	54.00	-13.75	Average
2	5149.980	8.33	34.32	42.36	39.93	40.22	54.00	-13.78	Average
3	5260.000	8.49	34.41	42.25	95.56	96.21	------	------	Average

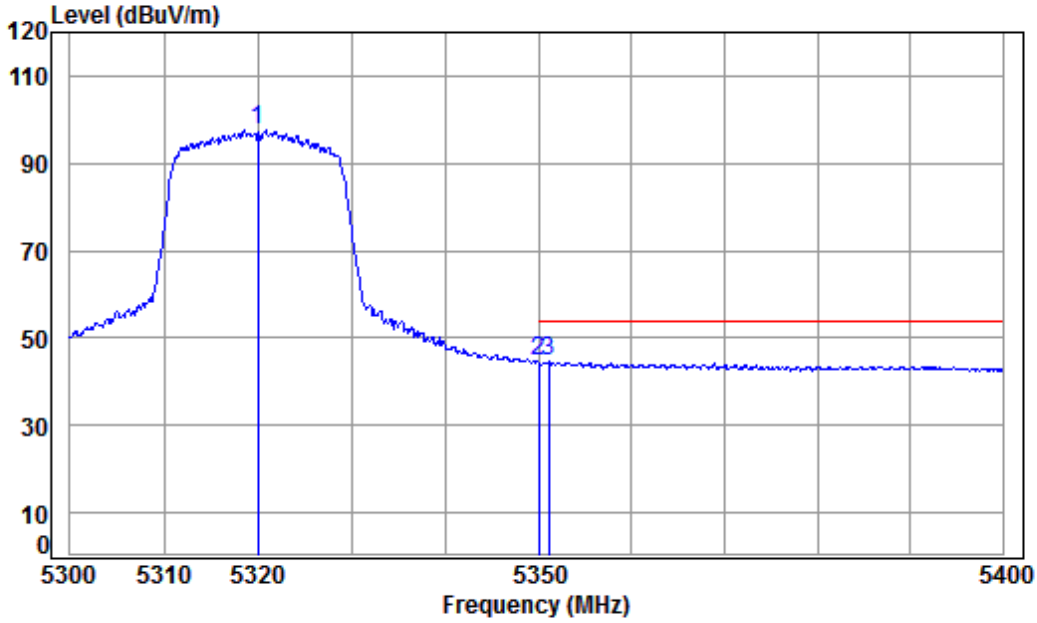
Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5320 Band edge
: 5G WIFI 11N20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5320.000	8.58	34.46	42.20	103.20	104.04	68.20	35.84	peak
2	5350.020	8.63	34.48	42.17	52.87	53.81	74.00	-20.19	peak
3	5350.767	8.63	34.48	42.17	52.96	53.90	74.00	-20.10	peak

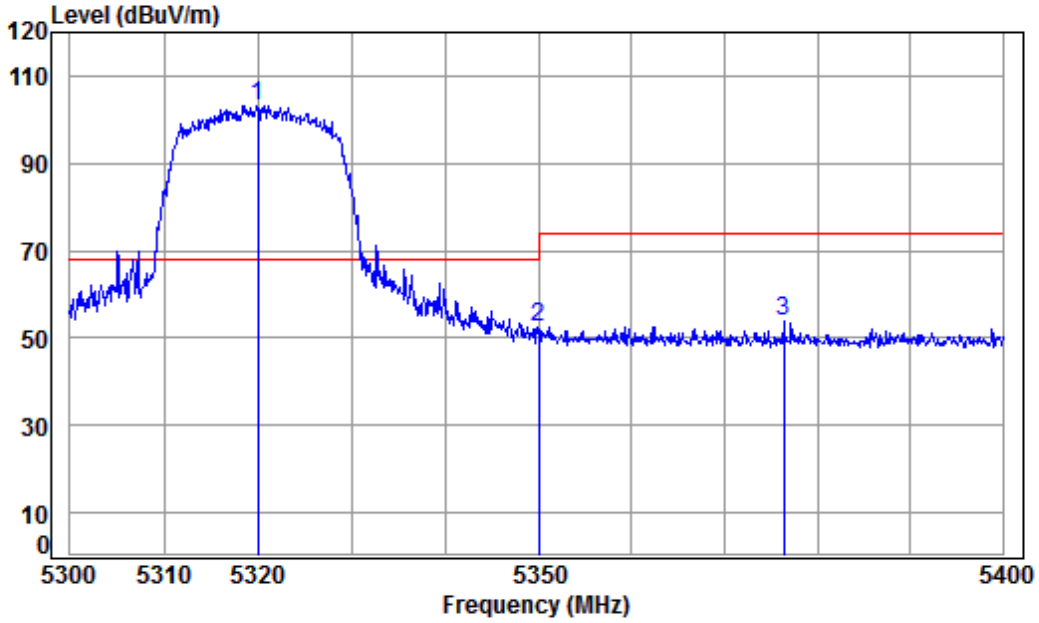
Mode:d; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5320 Band edge
: 5G WIFI 11N20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5320.000	8.58	34.46	42.20	96.73	97.57	------	------	Average
2 pp	5350.020	8.63	34.48	42.17	43.75	44.69	54.00	-9.31	Average
3	5351.066	8.63	34.48	42.17	43.72	44.66	54.00	-9.34	Average

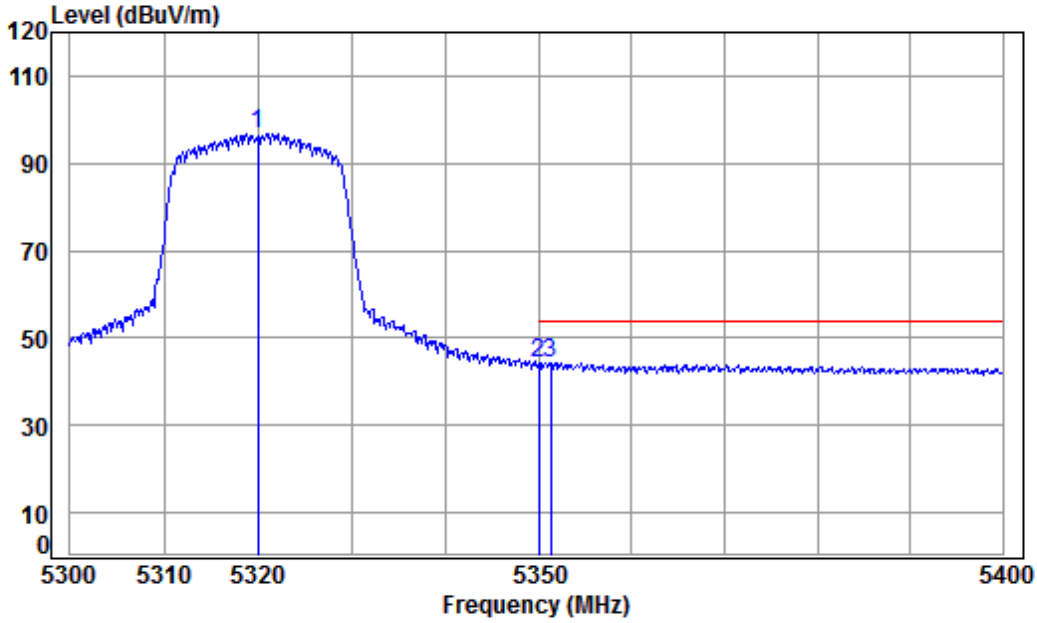
Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5320 Band edge
: 5G WIFI 11N20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5320.000	8.58	34.46	42.20	102.49	103.33	68.20	35.13	Peak
2	5350.020	8.63	34.48	42.17	51.72	52.66	74.00	-21.34	Peak
3	5376.332	8.67	34.50	42.14	52.63	53.66	74.00	-20.34	Peak

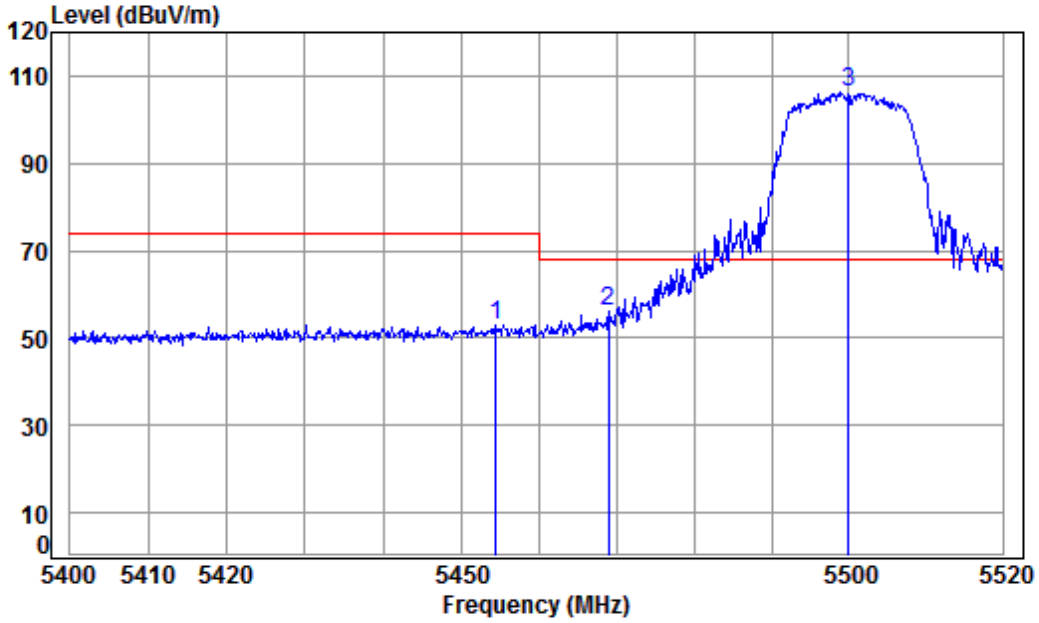
Mode:d; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5320 Band edge
: 5G WIFI 11N20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5320.000	8.58	34.46	42.20	96.08	96.92	------	------	Average
2 pp	5350.020	8.63	34.48	42.17	43.52	44.46	54.00	-9.54	Average
3	5351.267	8.63	34.48	42.17	43.43	44.37	54.00	-9.63	Average

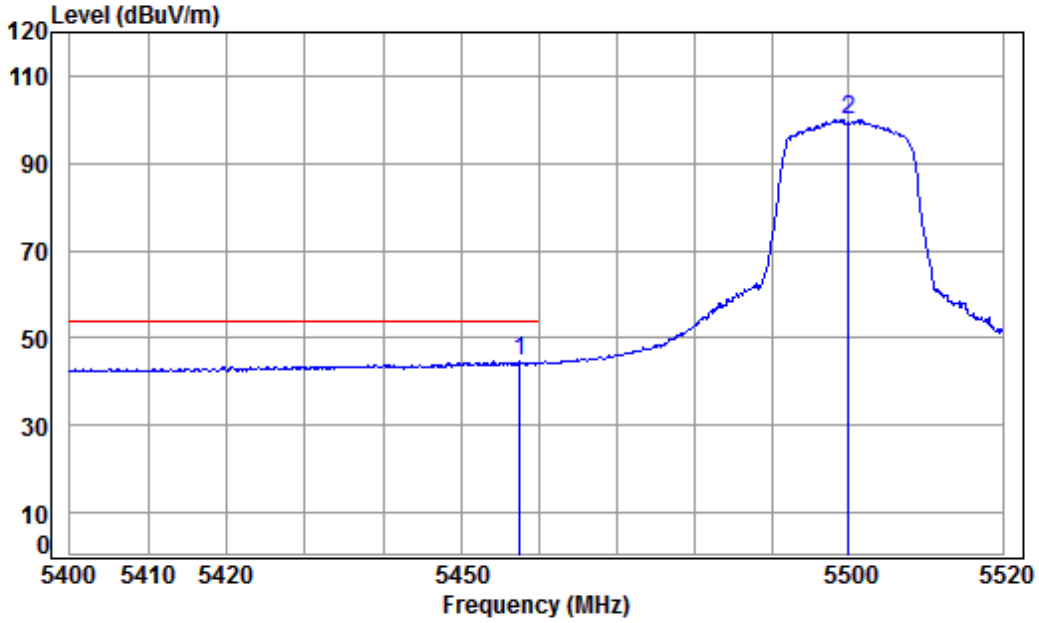
Mode:e; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5500 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5454.513	8.78	34.57	42.07	51.85	53.13	74.00	-20.87	peak
2	5468.918	8.80	34.58	42.06	54.75	56.07	68.20	-12.13	peak
3 pp	5500.000	8.85	34.60	42.03	104.70	106.12	68.20	37.92	peak

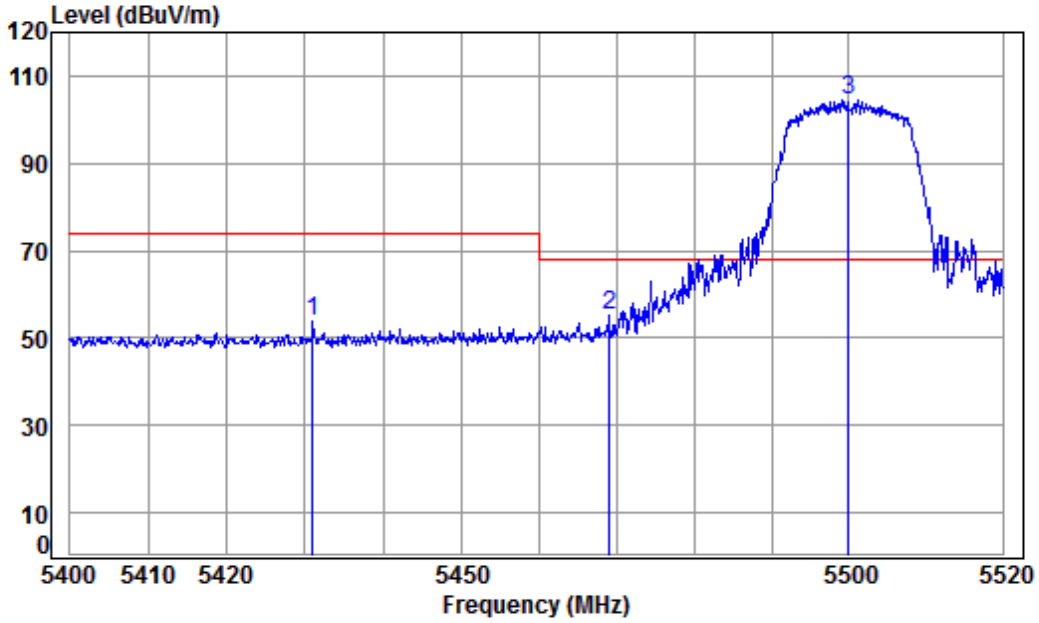
Mode:e; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5500 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5457.511	8.79	34.57	42.07	43.25	44.54	54.00	-9.46	Average
2	5500.000	8.85	34.60	42.03	98.49	99.91	------	------	Average

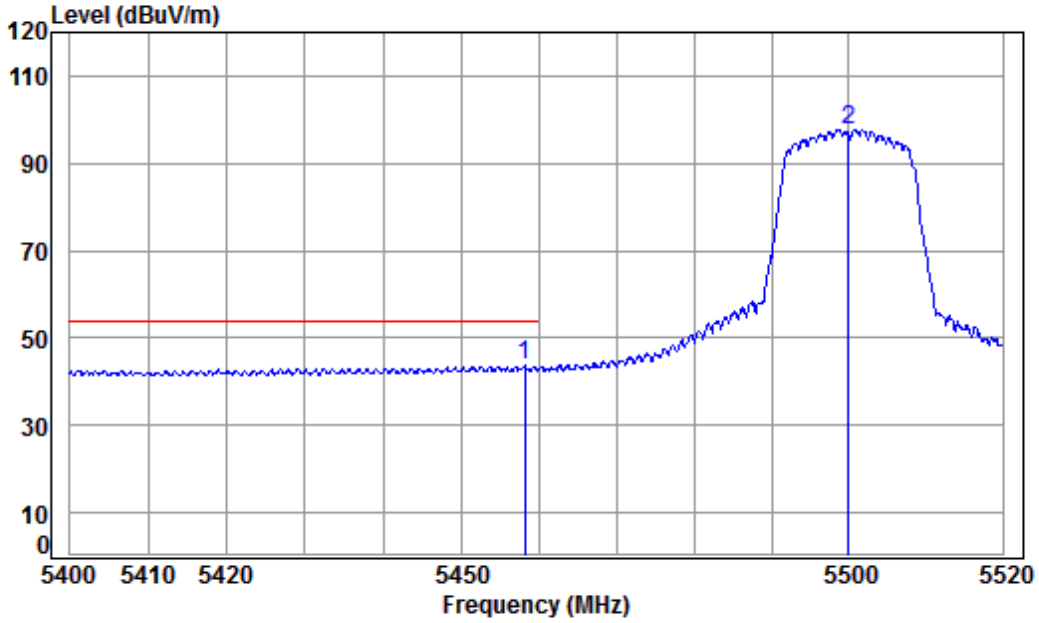
Mode:e; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5500 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5430.947	8.75	34.55	42.10	52.66	53.86	74.00	-20.14	Peak
2	5469.038	8.80	34.58	42.06	53.68	55.00	68.20	-13.20	peak
3 pp	5500.000	8.85	34.60	42.03	103.07	104.49	68.20	36.29	Peak

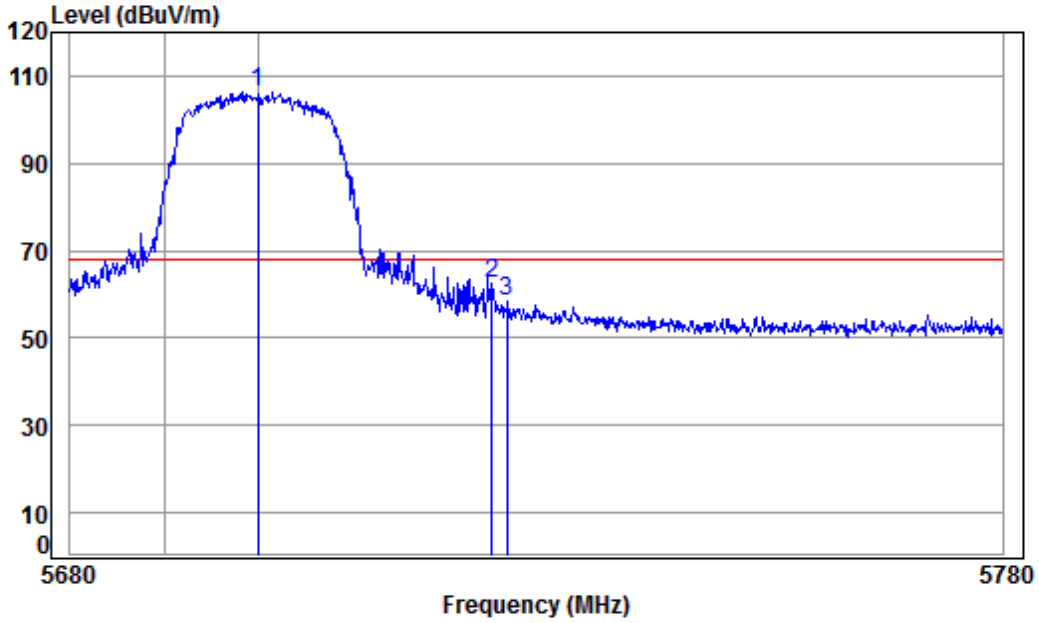
Mode:e; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5500 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5458.230	8.79	34.57	42.07	42.30	43.59	54.00	-10.41	Average
2	5500.000	8.85	34.60	42.03	96.34	97.76	------	------	Average

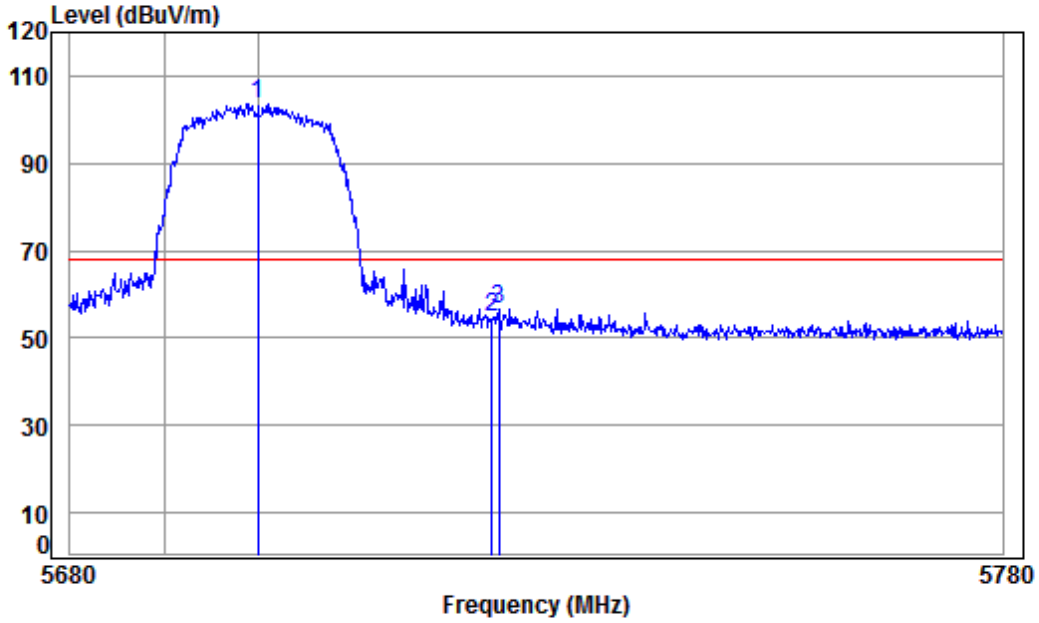
Mode:e; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5700 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5700.000	9.56	34.81	41.86	103.77	106.28	68.20	38.08	peak
2	5725.000	9.64	34.83	41.84	59.88	62.51	68.20	-5.69	peak
3	5726.683	9.65	34.83	41.84	55.96	58.60	68.20	-9.60	peak

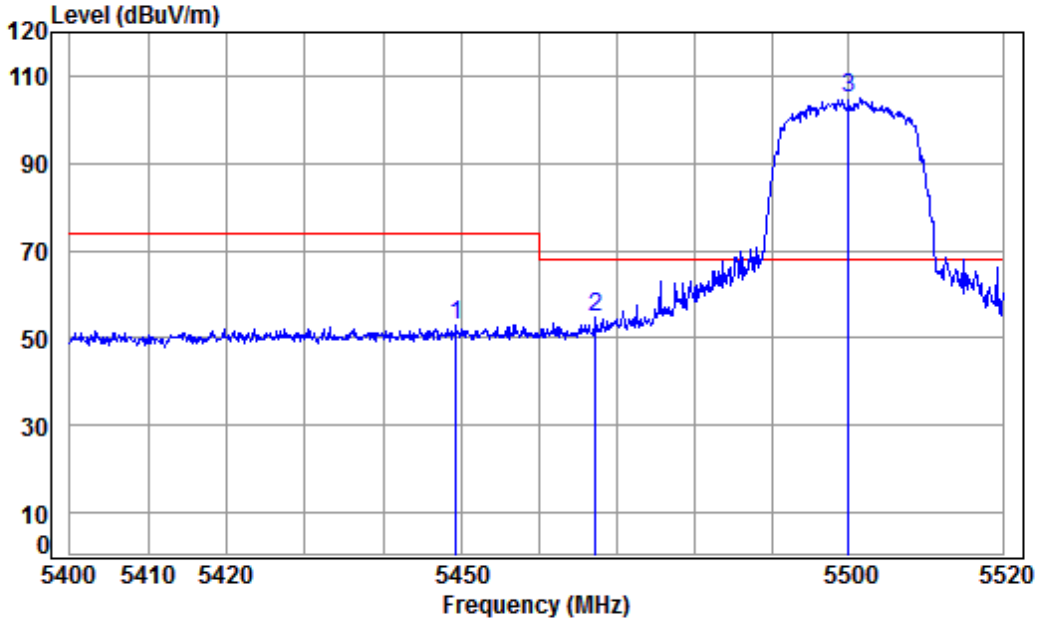
Mode:e; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5700 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5700.000	9.56	34.81	41.86	101.10	103.61	68.20	35.41	Peak
2	5725.000	9.64	34.83	41.84	52.04	54.67	68.20	-13.53	Peak
3	5725.783	9.65	34.83	41.84	54.02	56.66	68.20	-11.54	Peak

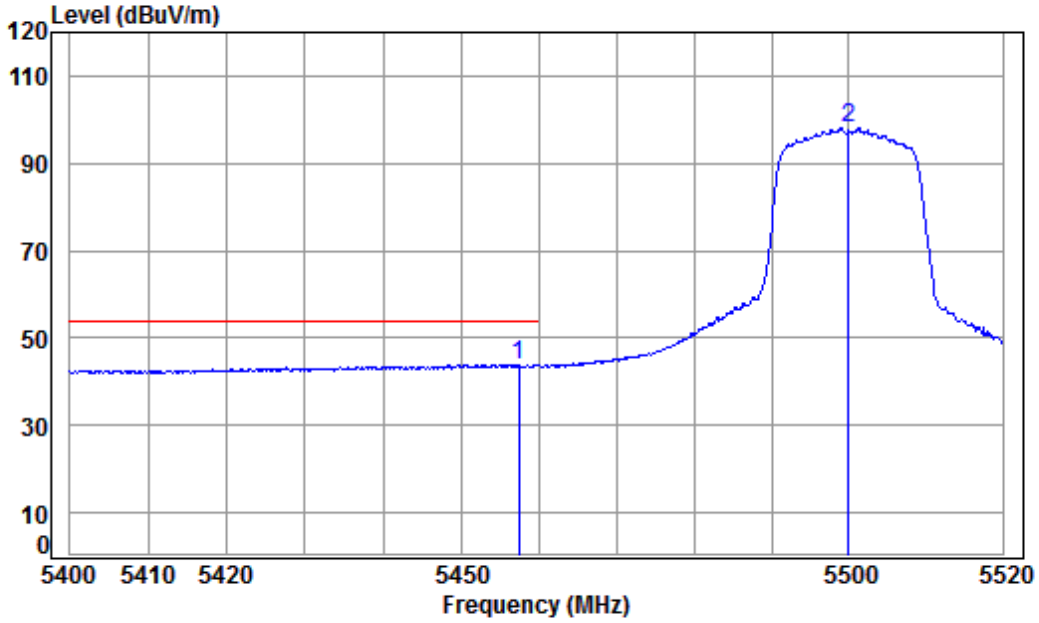
Mode:e; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5500 Band edge
: 5G WIFI 11n20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5449.360	8.78	34.56	42.08	51.76	53.02	74.00	-20.98	peak
2	5467.355	8.80	34.58	42.06	53.24	54.56	68.20	-13.64	peak
3 pp	5500.000	8.85	34.60	42.03	103.33	104.75	68.20	36.55	peak

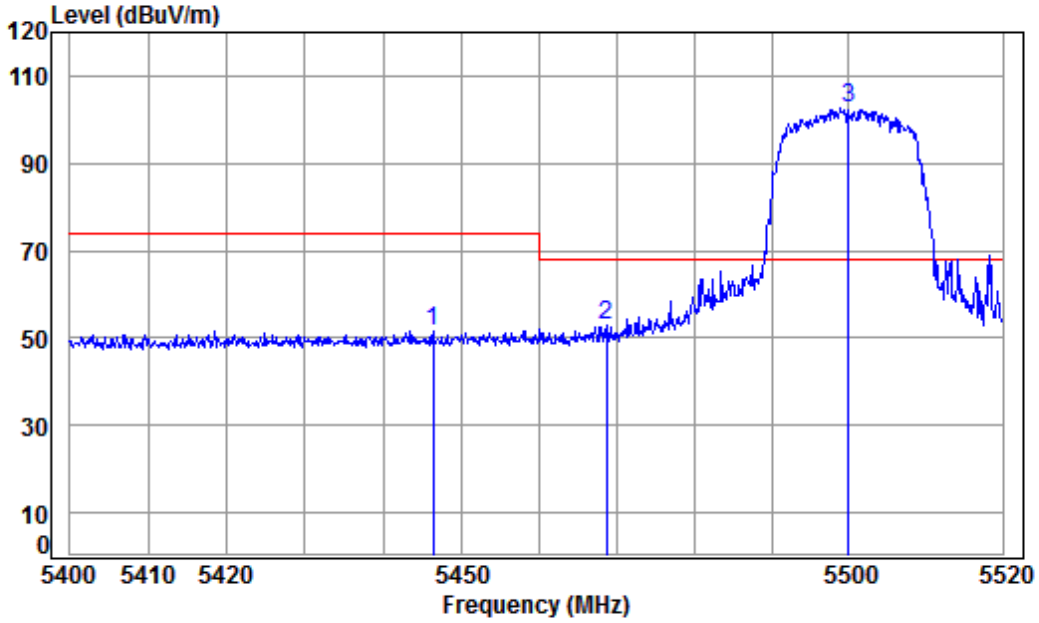
Mode:e; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5500 Band edge
: 5G WIFI 11n20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5457.391	8.79	34.57	42.07	42.57	43.86	54.00	-10.14	Average
2	5500.000	8.85	34.60	42.03	96.61	98.03	------	------	Average

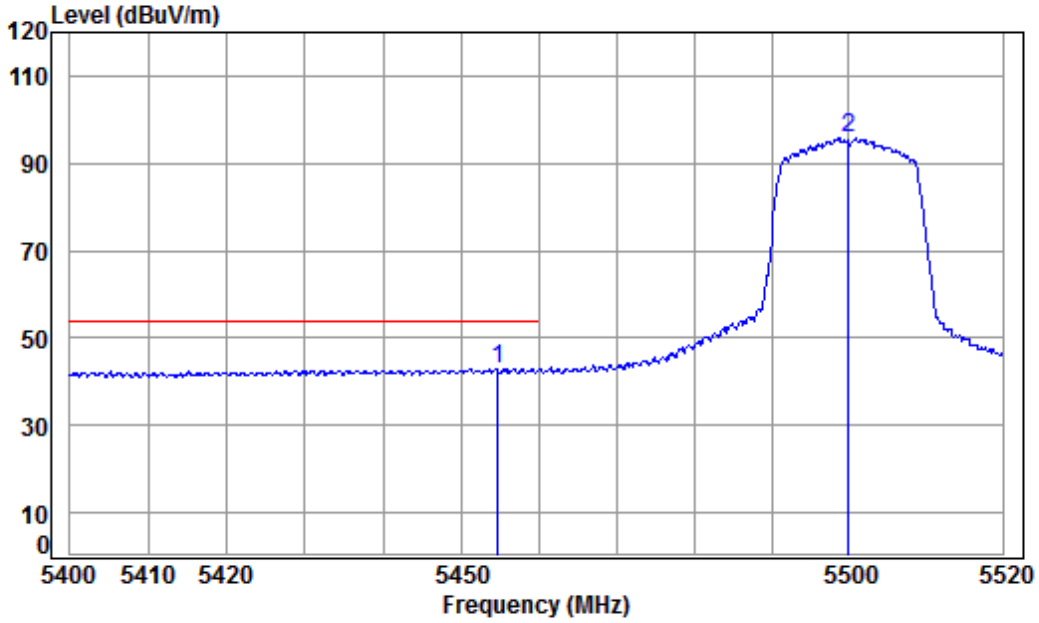
Mode:e; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5500 Band edge
: 5G WIFI 11n20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5446.367	8.77	34.56	42.08	50.53	51.78	74.00	-22.22	Peak
2	5468.678	8.80	34.58	42.06	51.80	53.12	68.20	-15.08	peak
3 pp	5500.000	8.85	34.60	42.03	101.17	102.59	68.20	34.39	Peak

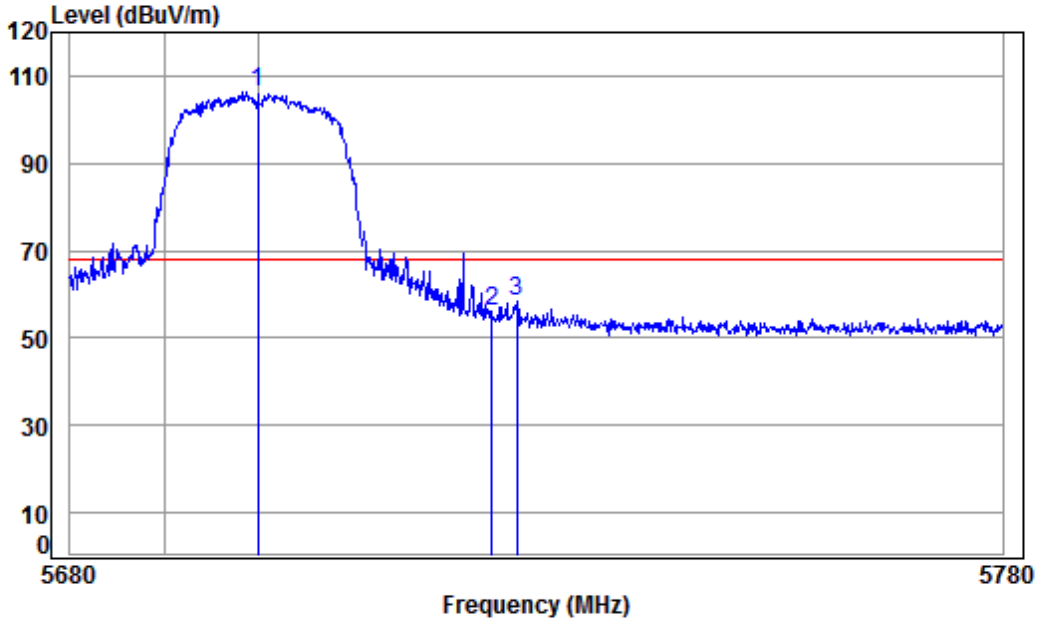
Mode:e; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5500 Band edge
: 5G WIFI 11n20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5454.752	8.78	34.57	42.07	41.68	42.96	54.00	-11.04	Average
2	5500.000	8.85	34.60	42.03	94.36	95.78	------	------	Average

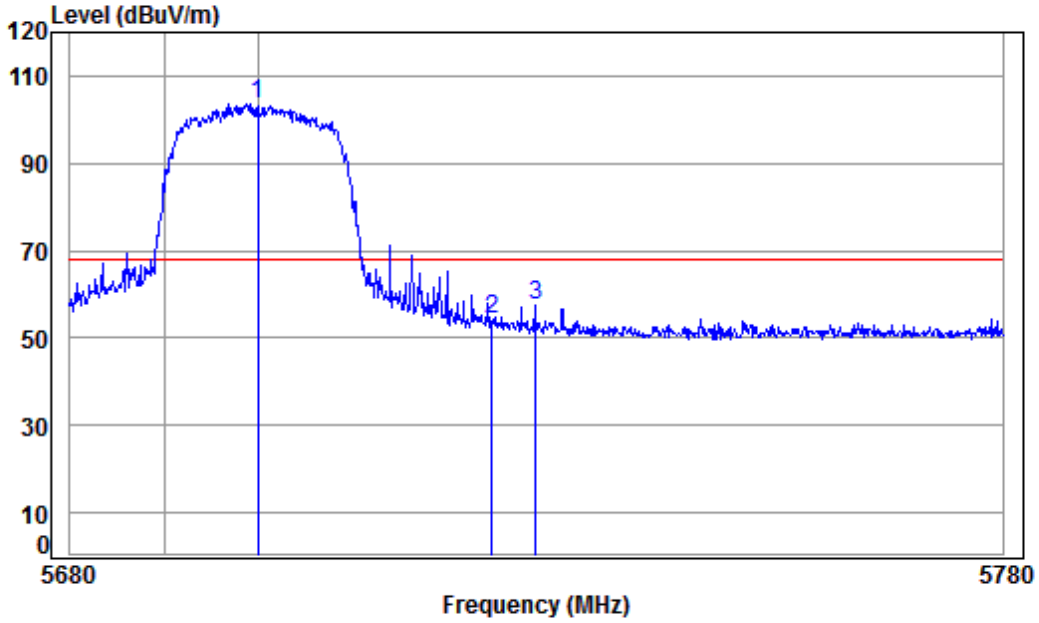
Mode:e; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5700 Band edge
: 5G WIFI 11n20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5700.000	9.56	34.81	41.86	103.98	106.49	68.20	38.29	peak
2	5725.000	9.64	34.83	41.84	53.30	55.93	68.20	-12.27	peak
3	5727.682	9.65	34.83	41.84	55.68	58.32	68.20	-9.88	peak

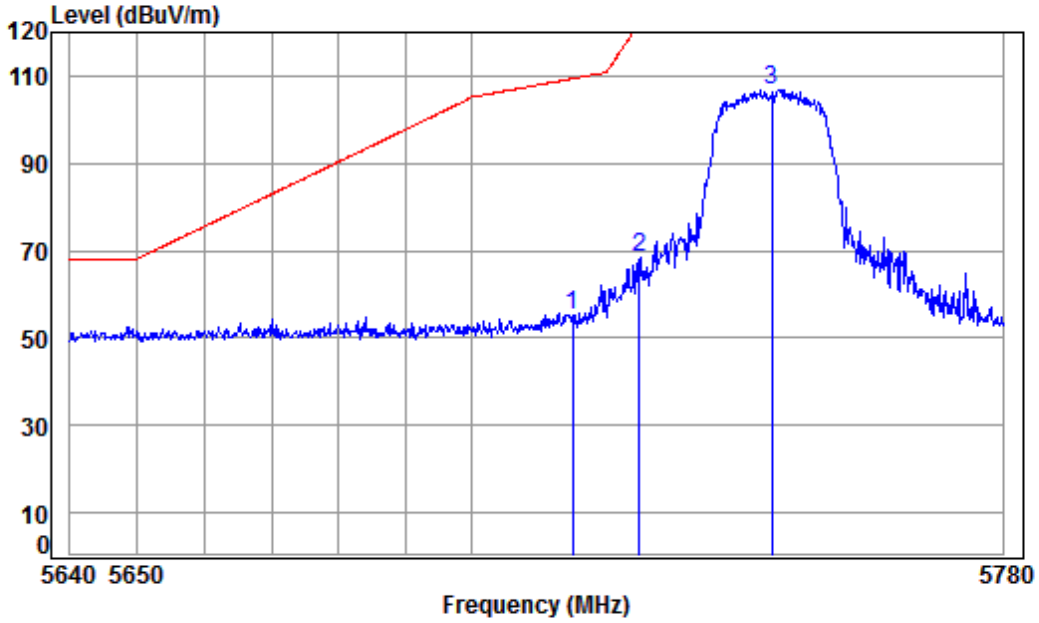
Mode:e; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5700 Band edge
: 5G WIFI 11n20
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5700.000	9.56	34.81	41.86	101.22	103.73	68.20	35.53	Peak
2	5725.000	9.64	34.83	41.84	51.50	54.13	68.20	-14.07	Peak
3	5729.682	9.66	34.84	41.83	54.85	57.52	68.20	-10.68	Peak

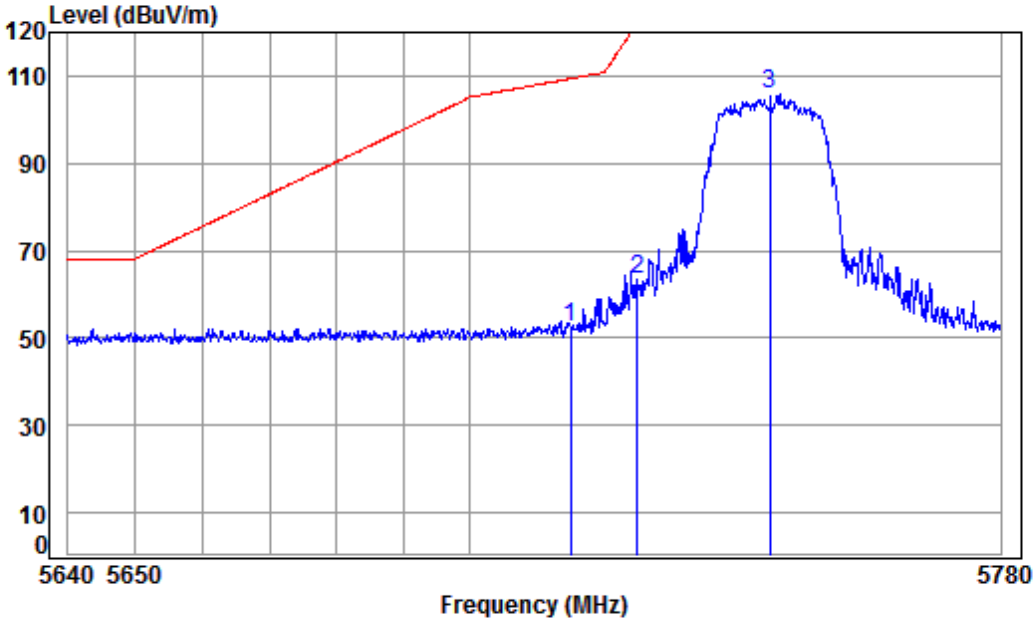
Mode:f; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5745 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5715.000	9.61	34.82	41.85	52.85	55.43	109.40	-53.97	peak
2	5725.000	9.64	34.83	41.84	65.70	68.33	122.20	-53.87	peak
3 pp	5745.000	9.71	34.85	41.82	104.24	106.98	125.20	-18.22	peak

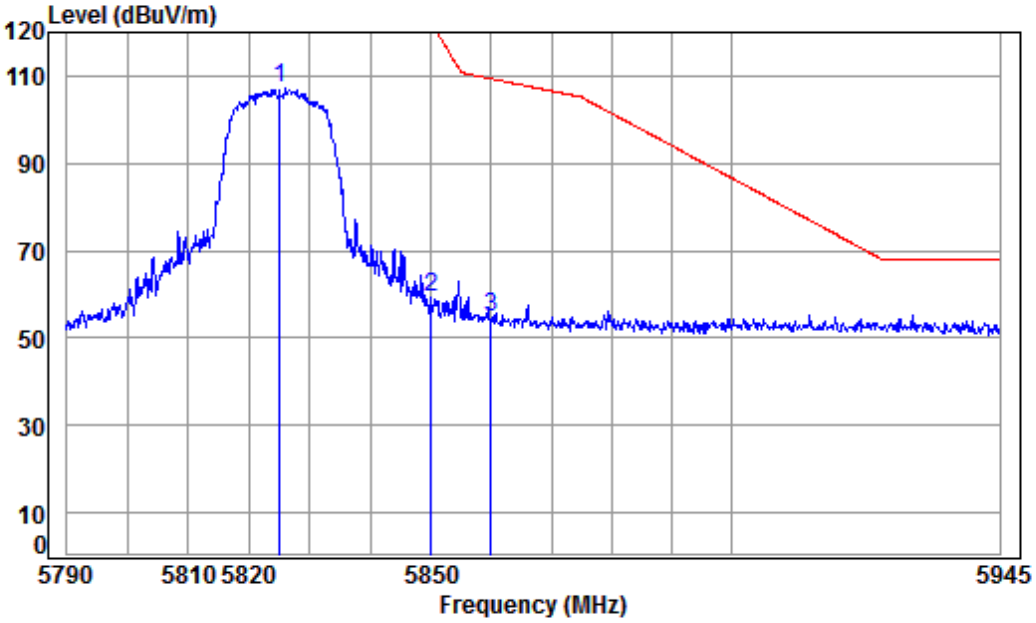
Mode:f; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5745 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5715.000	9.61	34.82	41.85	50.02	52.60	109.40	-56.80	peak
2	5725.000	9.64	34.83	41.84	60.65	63.28	122.20	-58.92	peak
3 pp	5745.000	9.71	34.85	41.82	103.04	105.78	125.20	-19.42	peak

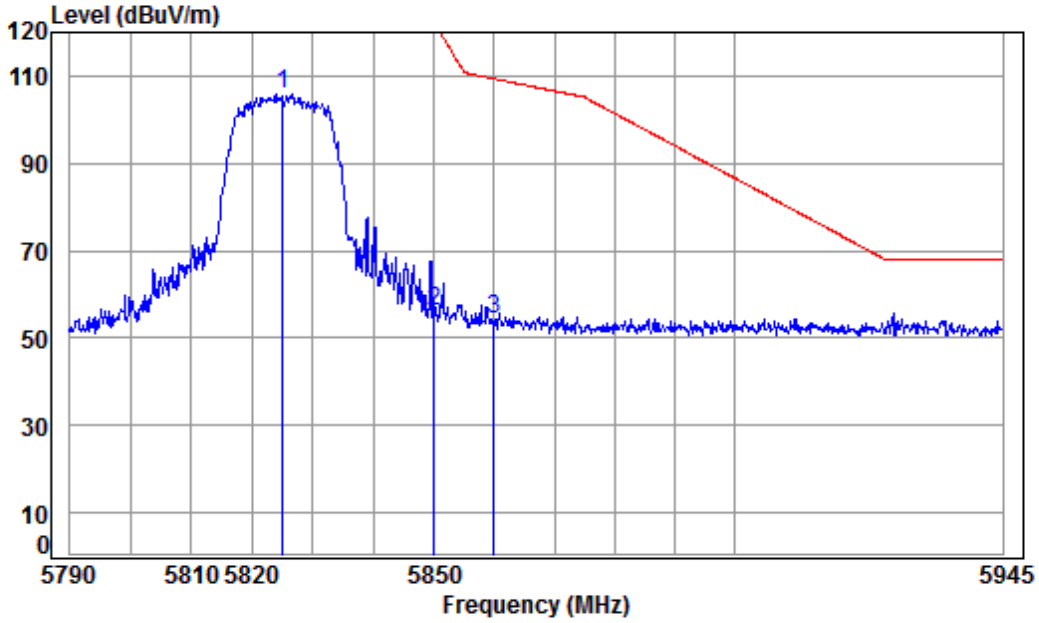
Mode:f; Polarization:Horizontal; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5825 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5825.000	9.98	34.93	41.75	104.16	107.32	125.20	-17.88	peak
2	5850.000	10.07	34.95	41.73	55.93	59.22	122.20	-62.98	peak
3	5860.000	10.10	34.96	41.72	51.34	54.68	109.40	-54.72	peak

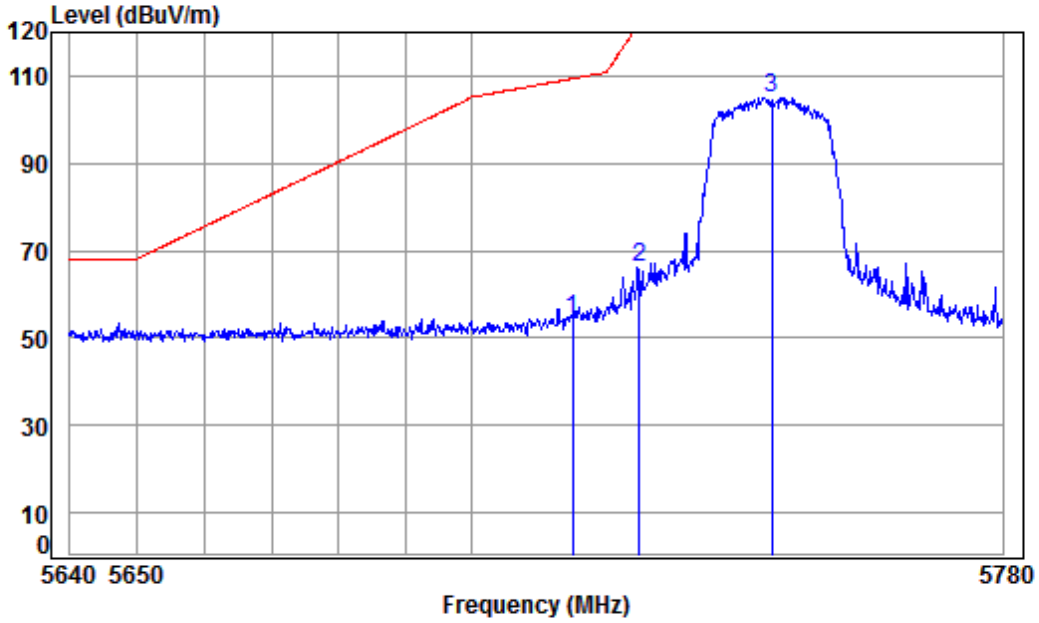
Mode:f; Polarization:Vertical; Modulation:802.11a; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5825 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5825.000	9.98	34.93	41.75	102.82	105.98	125.20	-19.22	peak
2	5850.000	10.07	34.95	41.73	52.63	55.92	122.20	-66.28	peak
3	5860.000	10.10	34.96	41.72	51.09	54.43	109.40	-54.97	peak

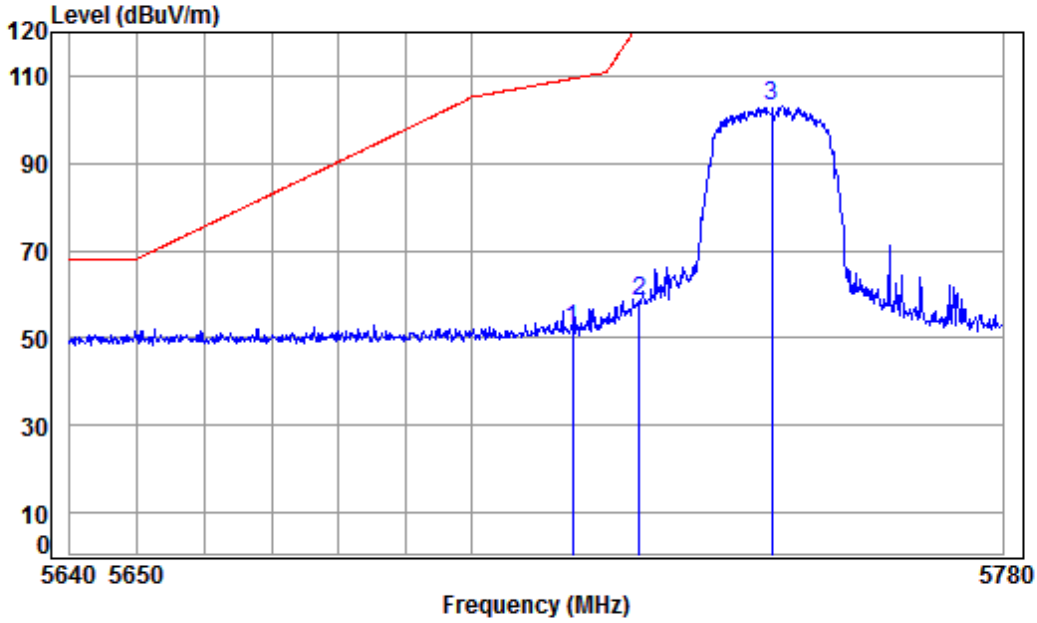
Mode:f; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5745 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5715.000	9.61	34.82	41.85	51.84	54.42	109.40	-54.98	peak
2	5725.000	9.64	34.83	41.84	63.51	66.14	122.20	-56.06	peak
3 pp	5745.000	9.71	34.85	41.82	102.30	105.04	125.20	-20.16	peak

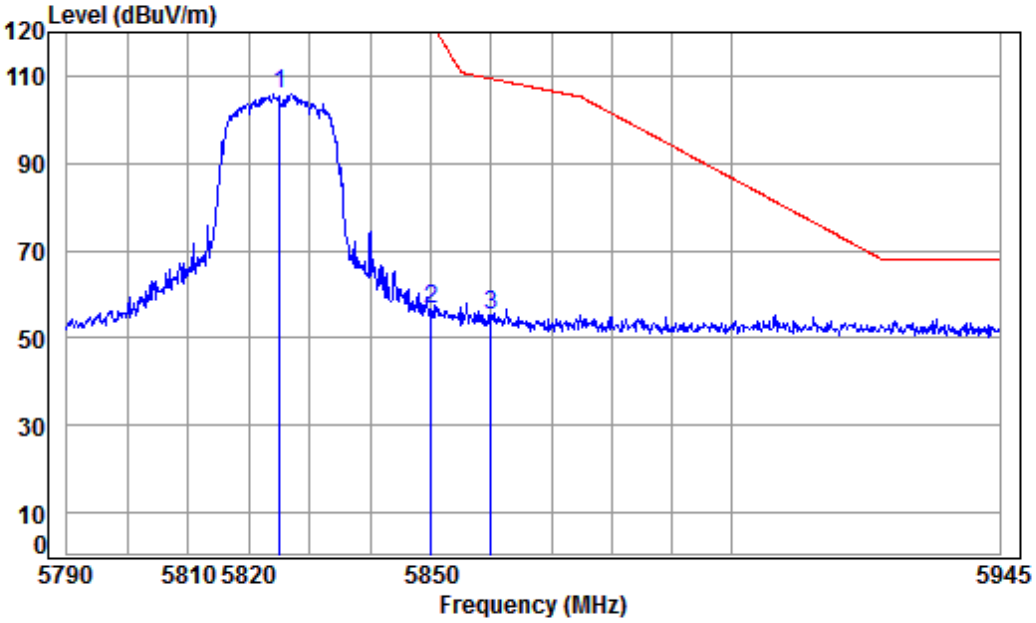
Mode:f; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5745 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5715.000	9.61	34.82	41.85	49.52	52.10	109.40	-57.30	peak
2	5725.000	9.64	34.83	41.84	55.81	58.44	122.20	-63.76	peak
3 pp	5745.000	9.71	34.85	41.82	100.42	103.16	125.20	-22.04	peak

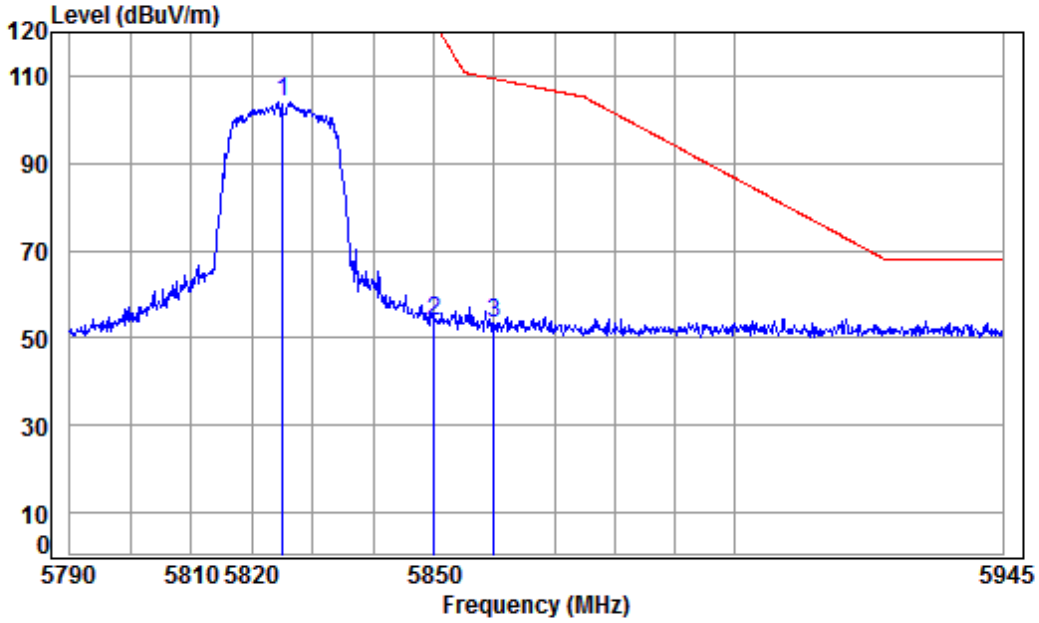
Mode:f; Polarization:Horizontal; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m HORIZONTAL
Job No : 04406CR
Mode : 5825 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5825.000	9.98	34.93	41.75	102.60	105.76	125.20	-19.44	peak
2	5850.000	10.07	34.95	41.73	53.35	56.64	122.20	-65.56	peak
3	5860.000	10.10	34.96	41.72	52.09	55.43	109.40	-53.97	peak

Mode:f; Polarization:Vertical; Modulation:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No : 04406CR
Mode : 5825 Band edge
: 5G WIFI 11A
: Powersetting 16

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5825.000	9.98	34.93	41.75	100.98	104.14	125.20	-21.06	peak
2	5850.000	10.07	34.95	41.73	50.35	53.64	122.20	-68.56	peak
3	5860.000	10.10	34.96	41.72	50.21	53.55	109.40	-55.85	peak

7.13 Frequency Stability

Test Requirement	47 CFR Part 15, Subpart C 15.407 (g)
Test Method:	ANSI C63.10 (2013) Section 6.8
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.

Remark: According to KDB 789033 D02, the grantee is responsible for ensuring that the EUT meets Section 15.407(g) requirements; however, the application for equipment certification is not required to include test reports with explicit demonstration of compliance.

8 Appendix

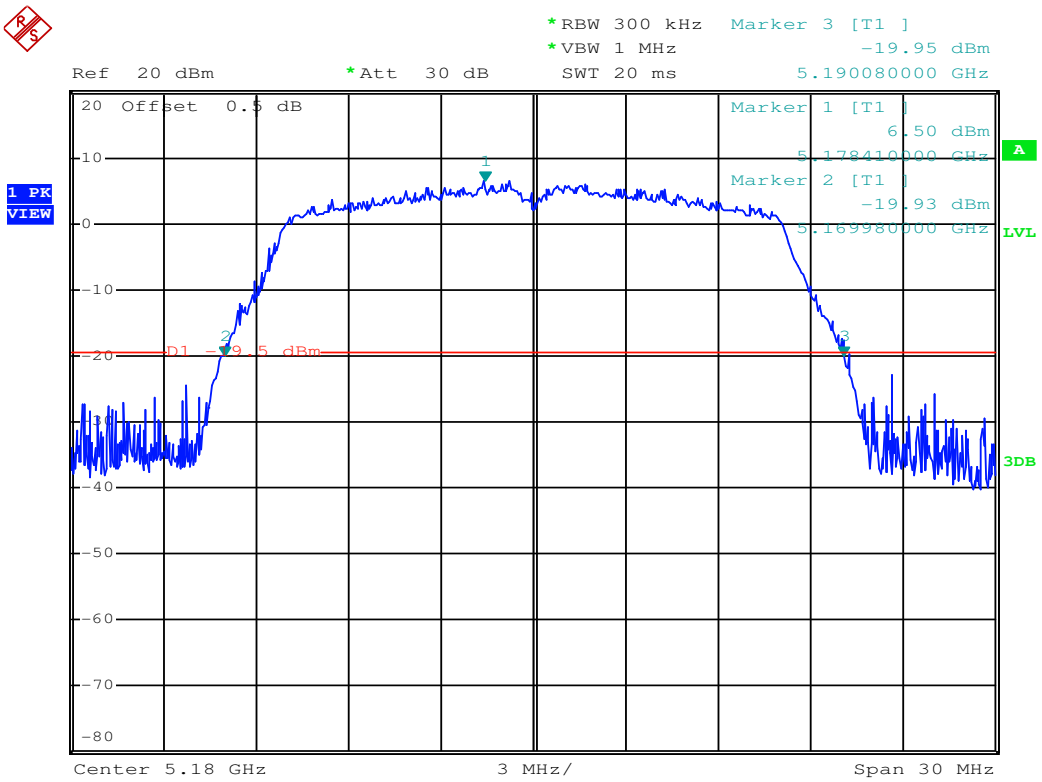
Appendix 15.407

1.Emission Bandwidth Measurement

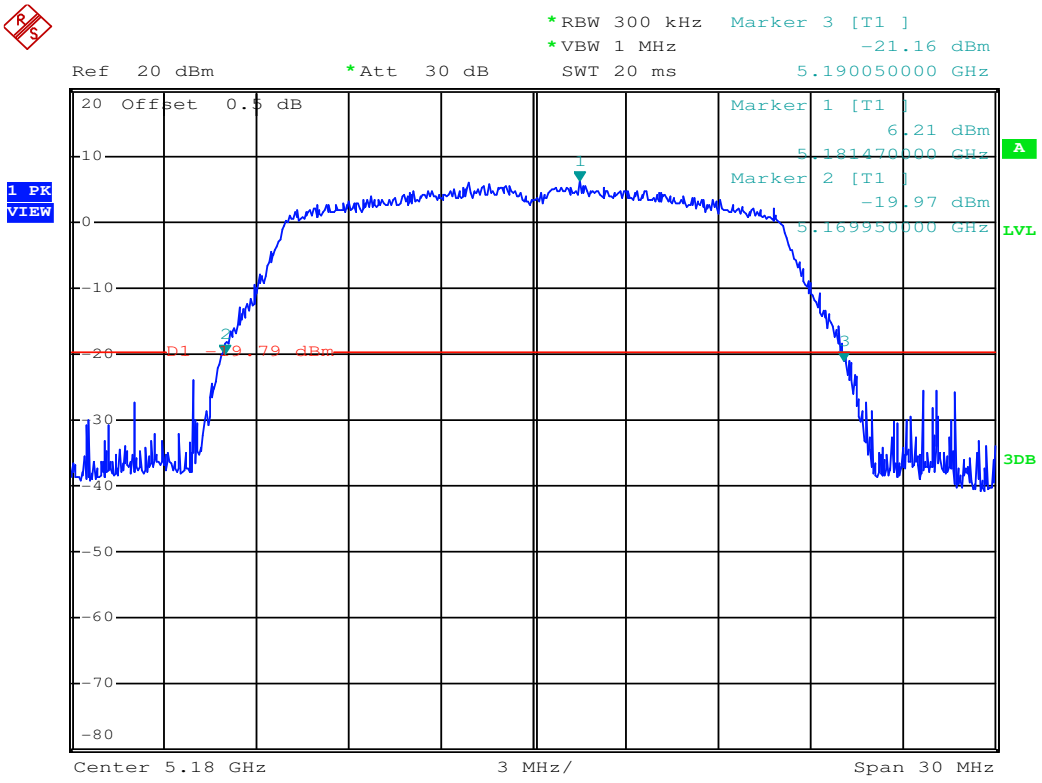
Test Mode	Test Channel	Ant	EBW[MHz]	Limit[MHz]	Verdict
11A	5180	Ant1	20.100	---	PASS
11A	5180	Ant2	20.100	---	PASS
11A	5220	Ant1	20.220	---	PASS
11A	5220	Ant2	20.280	---	PASS
11A	5240	Ant1	20.100	---	PASS
11A	5240	Ant2	20.130	---	PASS
11A	5260	Ant1	20.250	---	PASS
11A	5260	Ant2	20.100	---	PASS
11A	5300	Ant1	20.220	---	PASS
11A	5300	Ant2	20.370	---	PASS
11A	5320	Ant1	20.130	---	PASS
11A	5320	Ant2	20.280	---	PASS
11A	5500	Ant1	20.130	---	PASS
11A	5500	Ant2	20.340	---	PASS
11A	5580	Ant1	20.220	---	PASS
11A	5580	Ant2	20.190	---	PASS
11A	5700	Ant1	20.250	---	PASS
11A	5700	Ant2	20.130	---	PASS
11A	5745	Ant1	15.120	>=0.5	PASS
11A	5745	Ant2	15.090	>=0.5	PASS
11A	5785	Ant1	15.120	>=0.5	PASS
11A	5785	Ant2	15.090	>=0.5	PASS
11A	5825	Ant1	15.150	>=0.5	PASS
11A	5825	Ant2	15.150	>=0.5	PASS
11N20	5180	Ant1	20.370	---	PASS
11N20	5180	Ant2	20.490	---	PASS
11N20	5220	Ant1	20.670	---	PASS
11N20	5220	Ant2	20.550	---	PASS
11N20	5240	Ant1	20.640	---	PASS

11N20	5240	Ant2	20.580	---	PASS
11N20	5260	Ant1	20.580	---	PASS
11N20	5260	Ant2	20.610	---	PASS
11N20	5300	Ant1	21.240	---	PASS
11N20	5300	Ant2	20.610	---	PASS
11N20	5320	Ant1	20.610	---	PASS
11N20	5320	Ant2	20.550	---	PASS
11N20	5500	Ant1	20.520	---	PASS
11N20	5500	Ant2	20.550	---	PASS
11N20	5580	Ant1	20.400	---	PASS
11N20	5580	Ant2	20.400	---	PASS
11N20	5700	Ant1	20.610	---	PASS
11N20	5700	Ant2	20.640	---	PASS
11N20	5745	Ant1	15.180	>=0.5	PASS
11N20	5745	Ant2	15.120	>=0.5	PASS
11N20	5785	Ant1	15.120	>=0.5	PASS
11N20	5785	Ant2	15.120	>=0.5	PASS
11N20	5825	Ant1	15.090	>=0.5	PASS
11N20	5825	Ant2	15.120	>=0.5	PASS

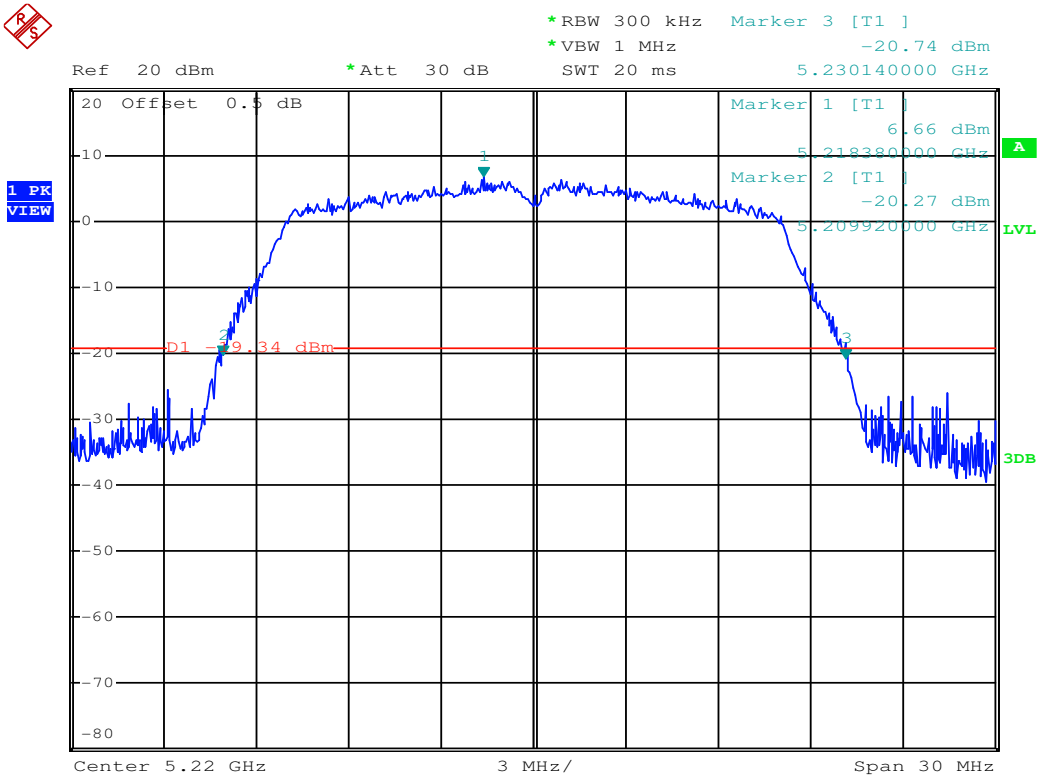
Emission Bandwidth Measurement_11A_5180_Ant1



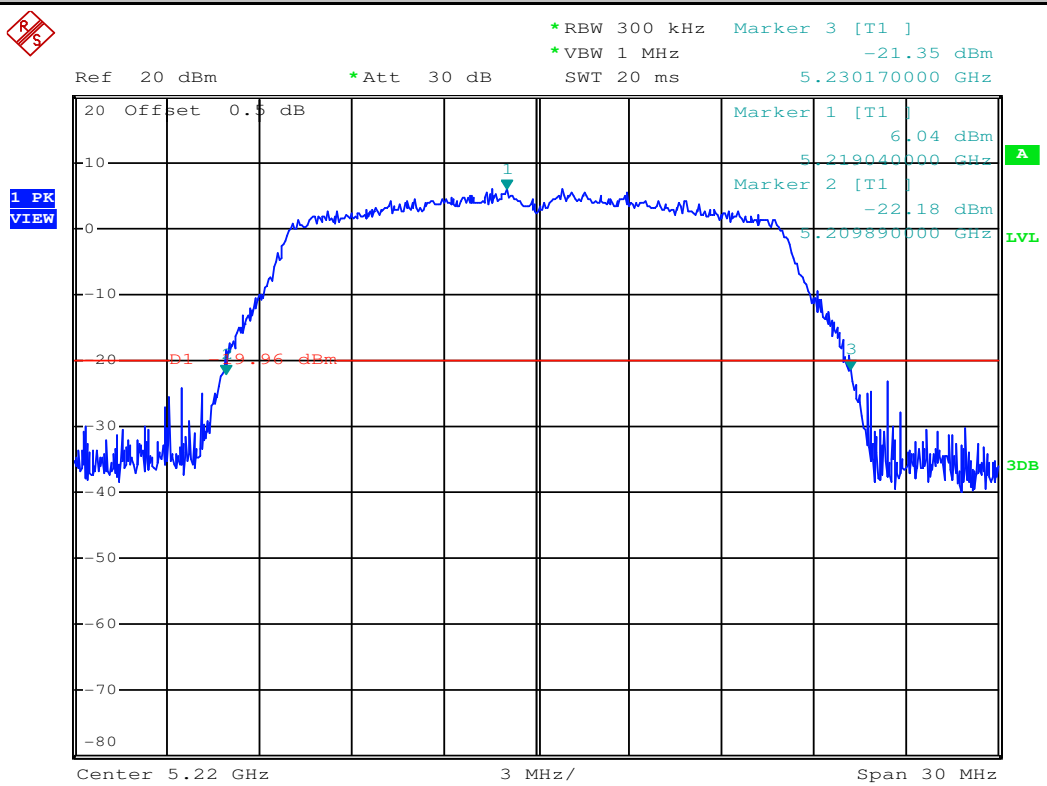
Emission Bandwidth Measurement_11A_5180_Ant2



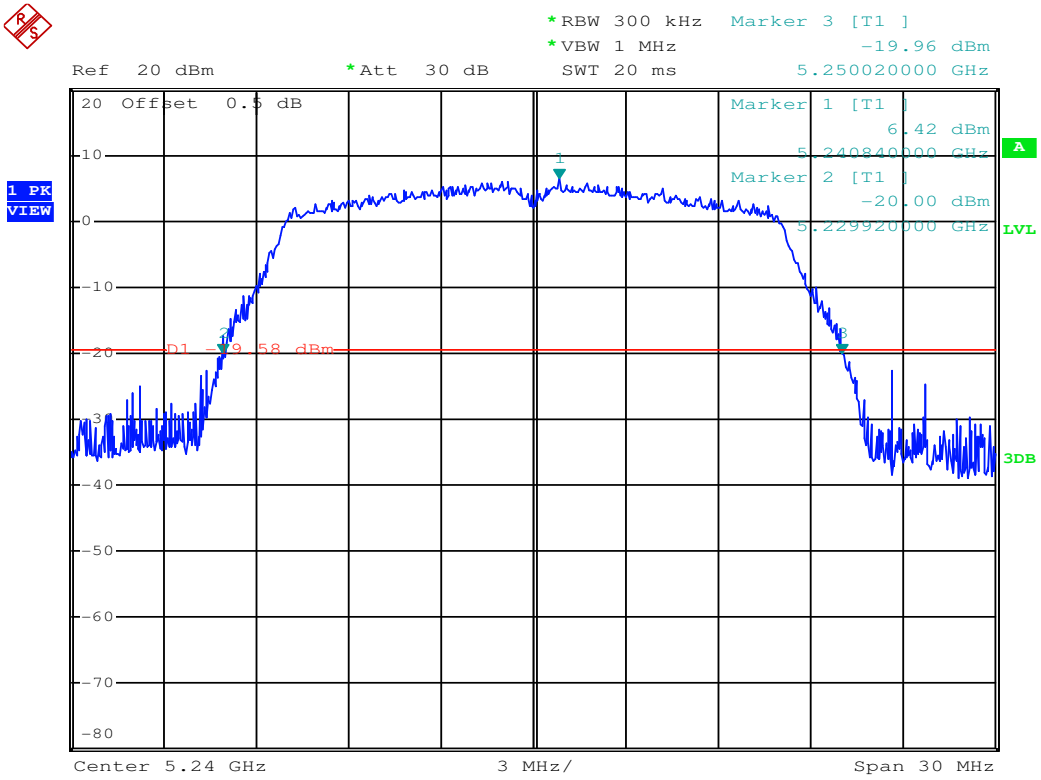
Emission Bandwidth Measurement_11A_5220_Ant1



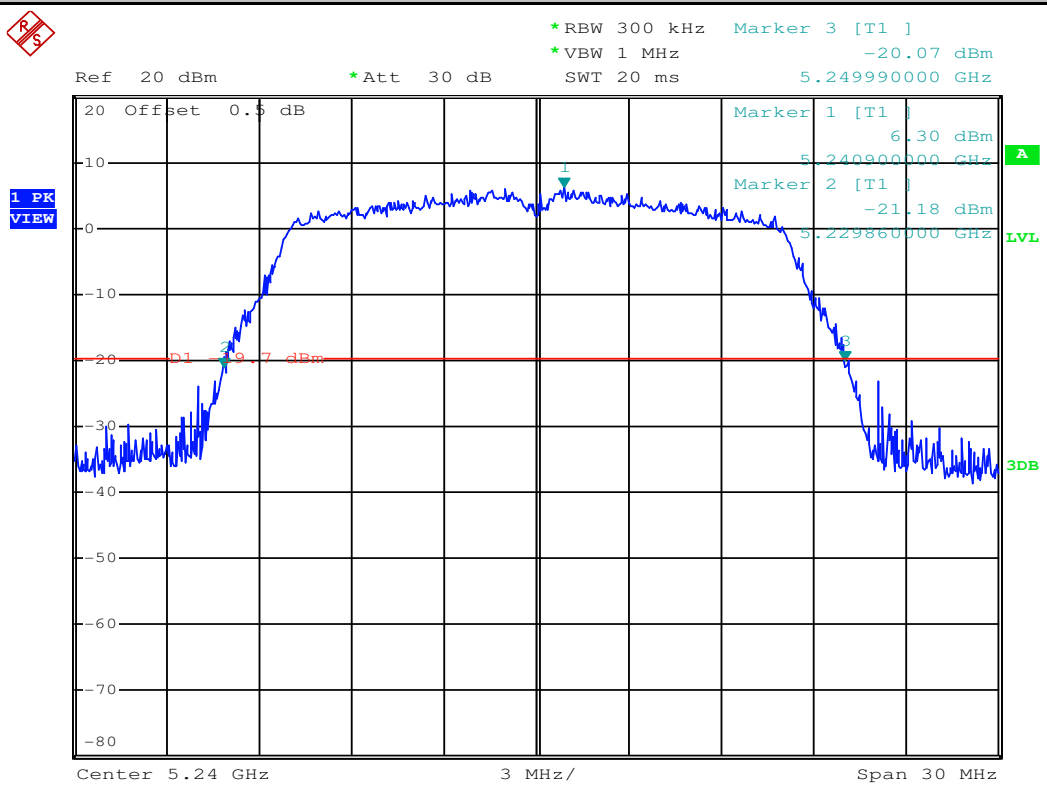
Emission Bandwidth Measurement_11A_5220_Ant2



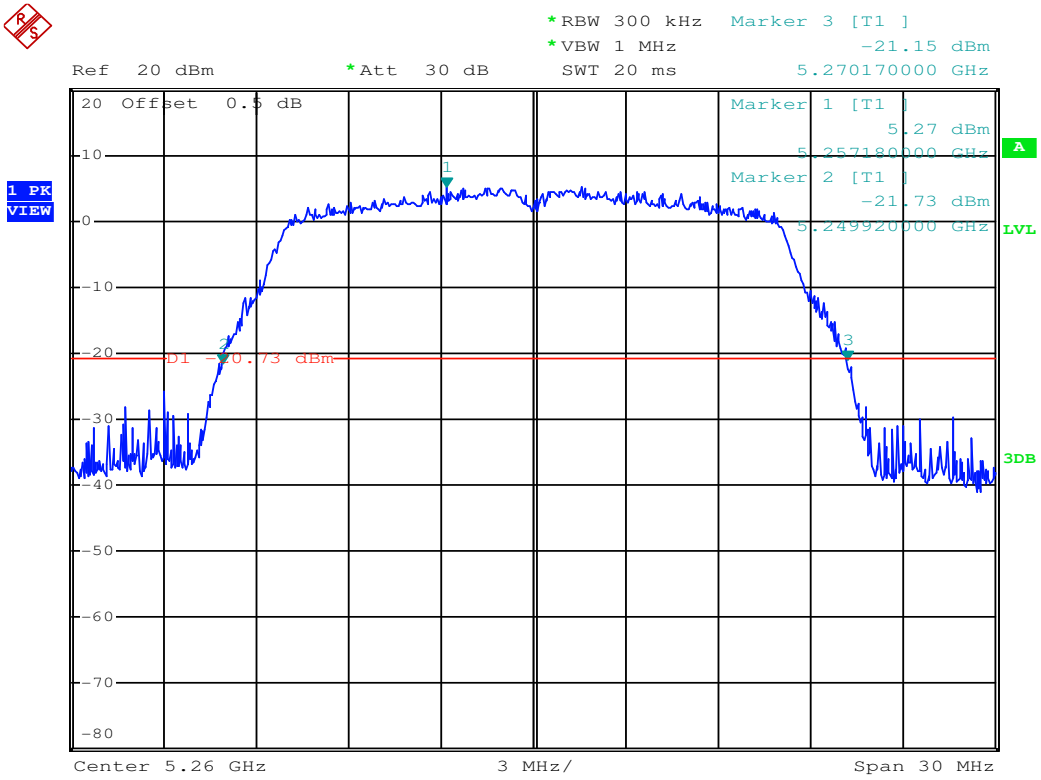
Emission Bandwidth Measurement_11A_5240_Ant1



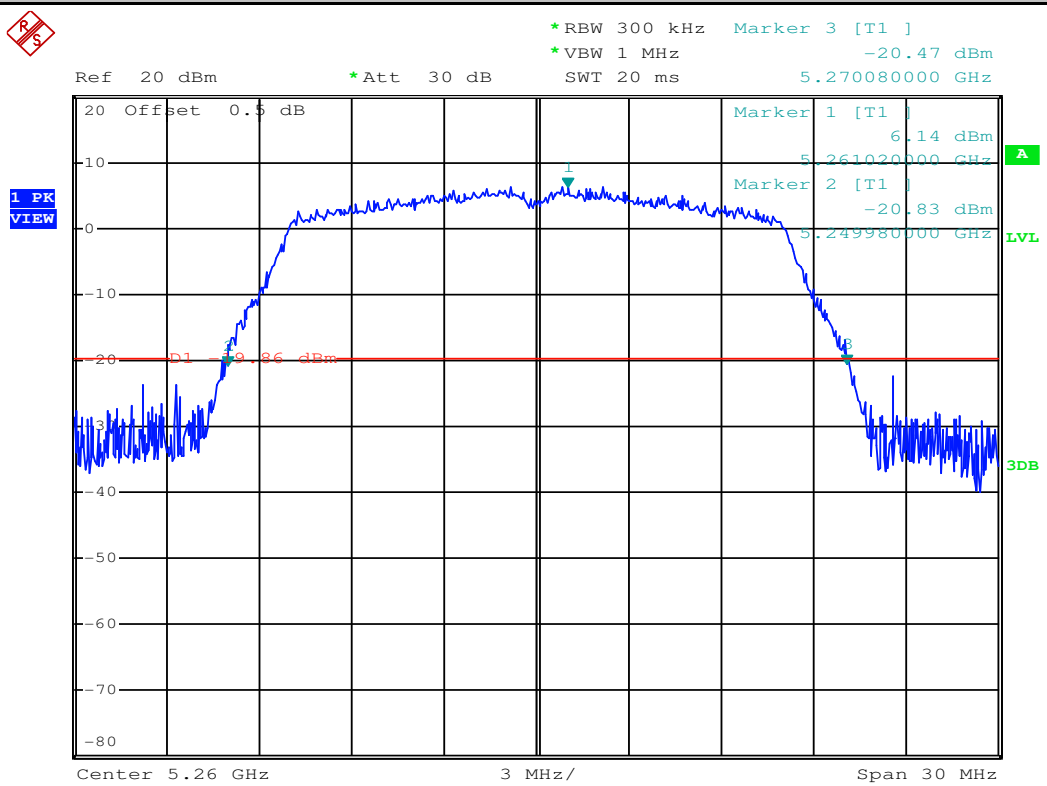
Emission Bandwidth Measurement_11A_5240_Ant2



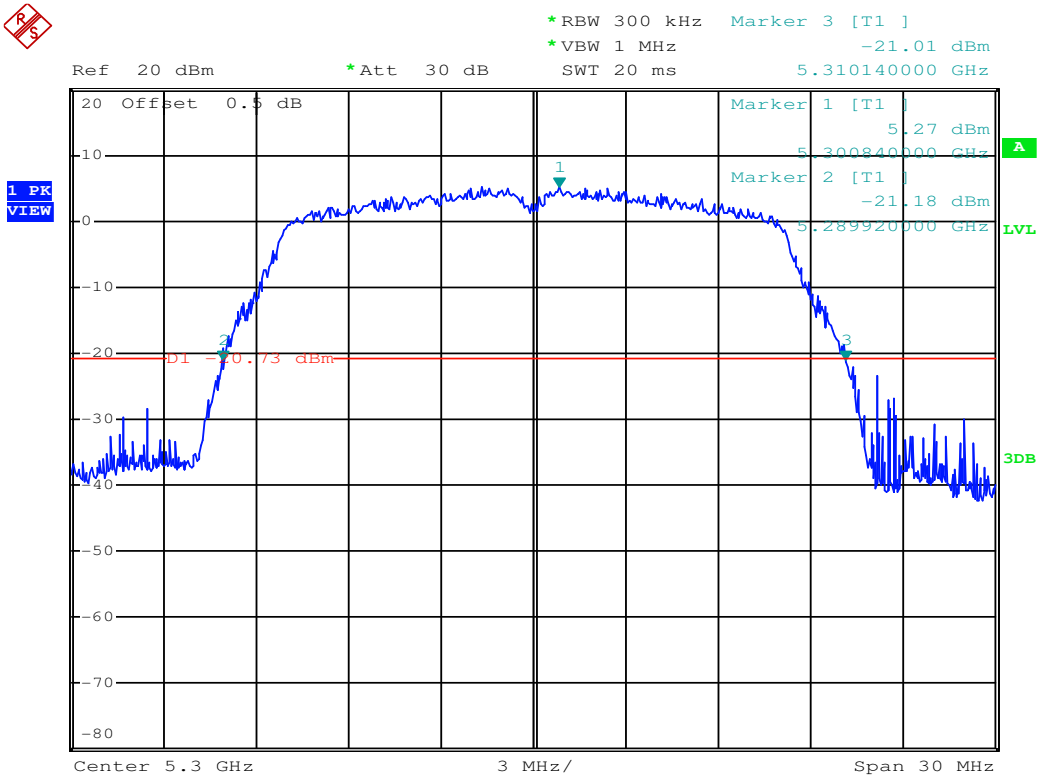
Emission Bandwidth Measurement_11A_5260_Ant1



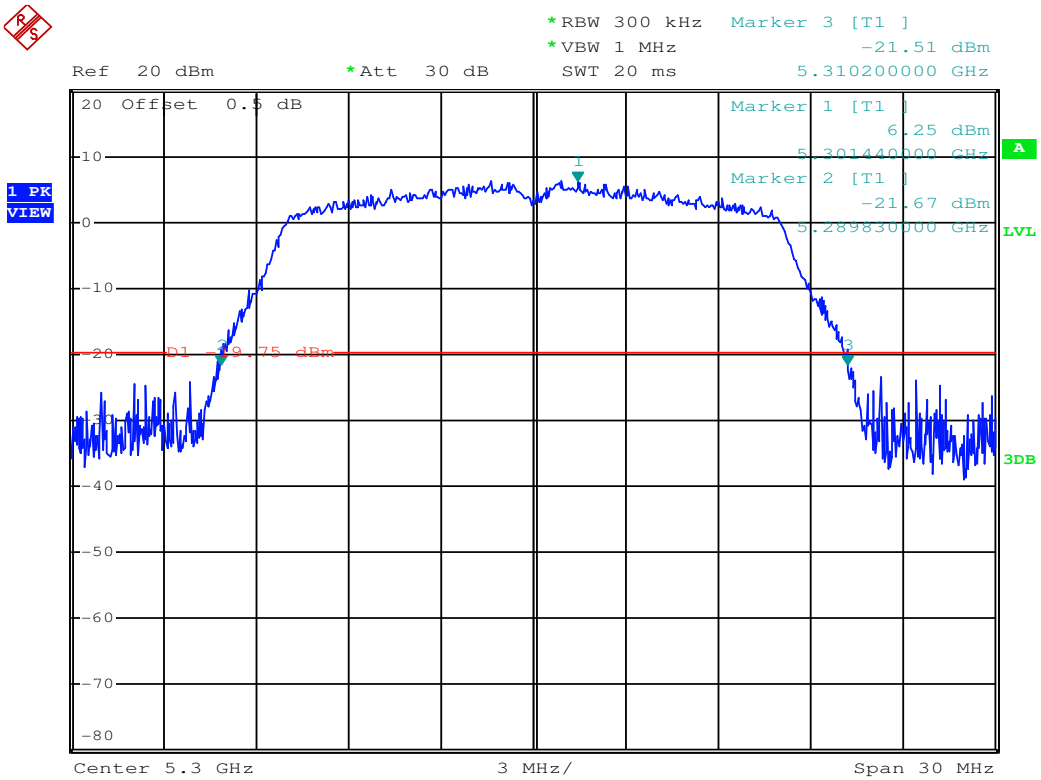
Emission Bandwidth Measurement_11A_5260_Ant2



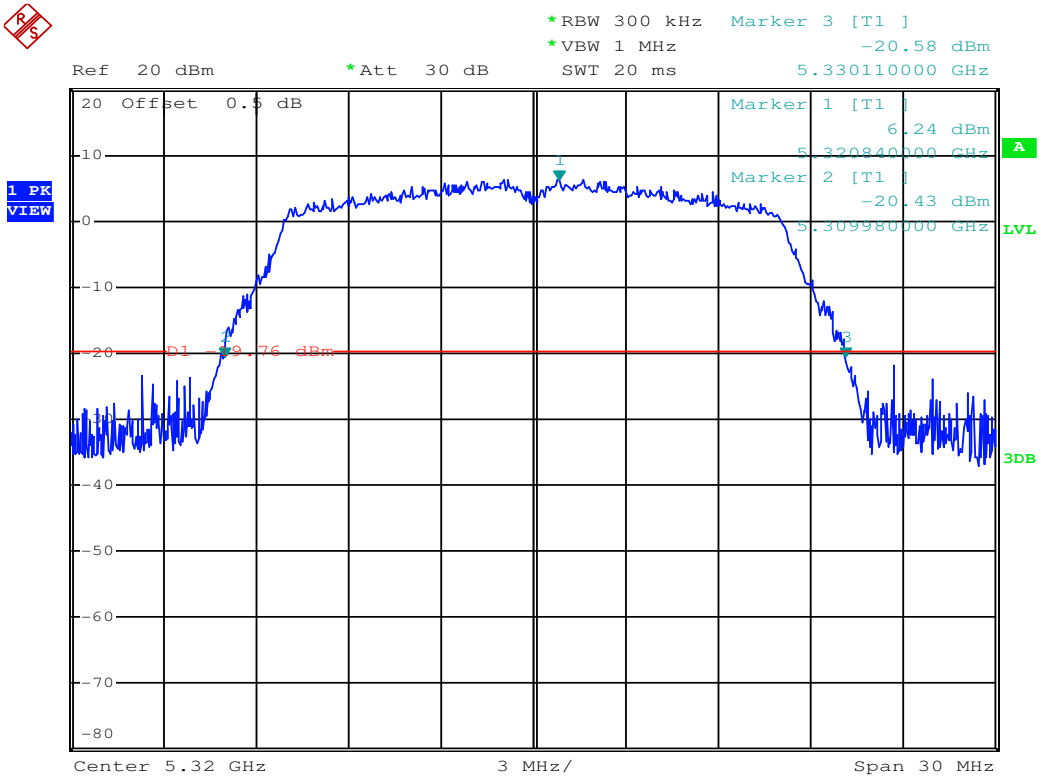
Emission Bandwidth Measurement_11A_5300_Ant1



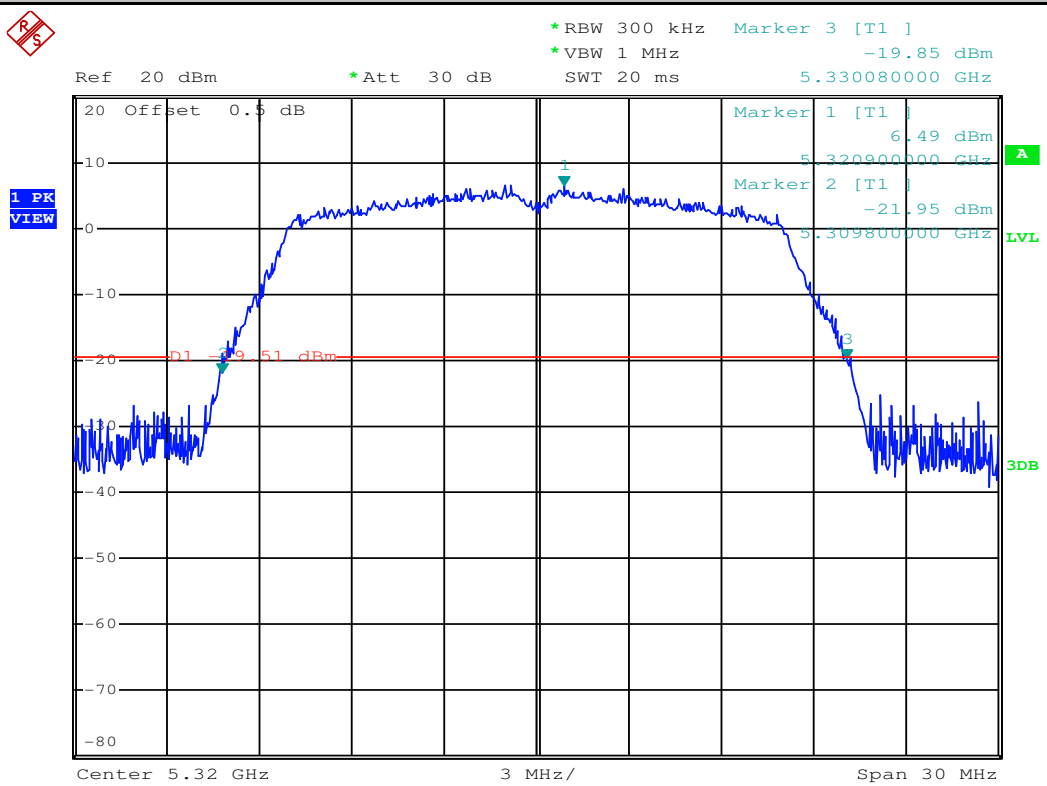
Emission Bandwidth Measurement_11A_5300_Ant2



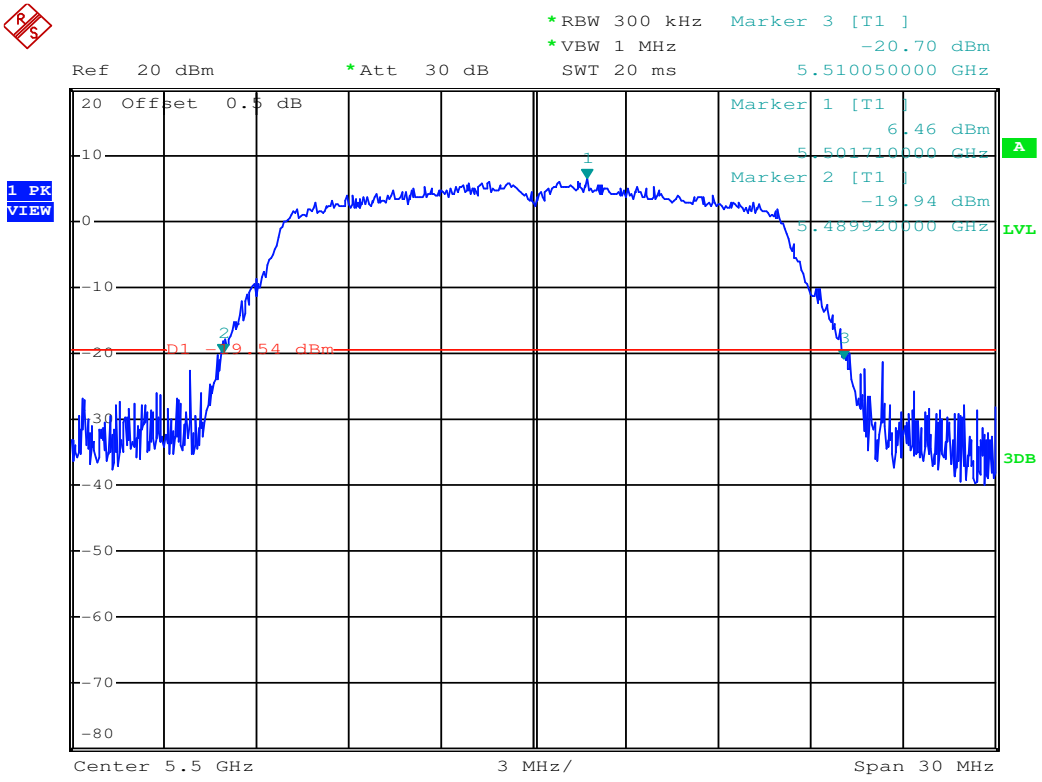
Emission Bandwidth Measurement_11A_5320_Ant1



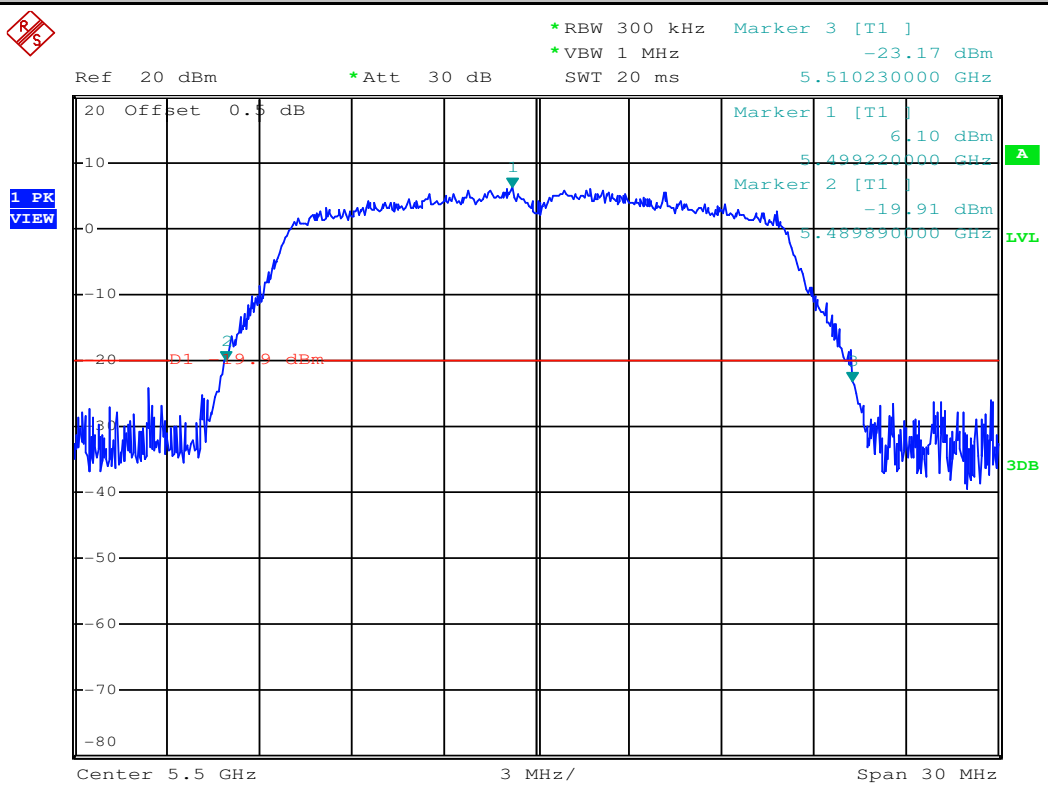
Emission Bandwidth Measurement_11A_5320_Ant2



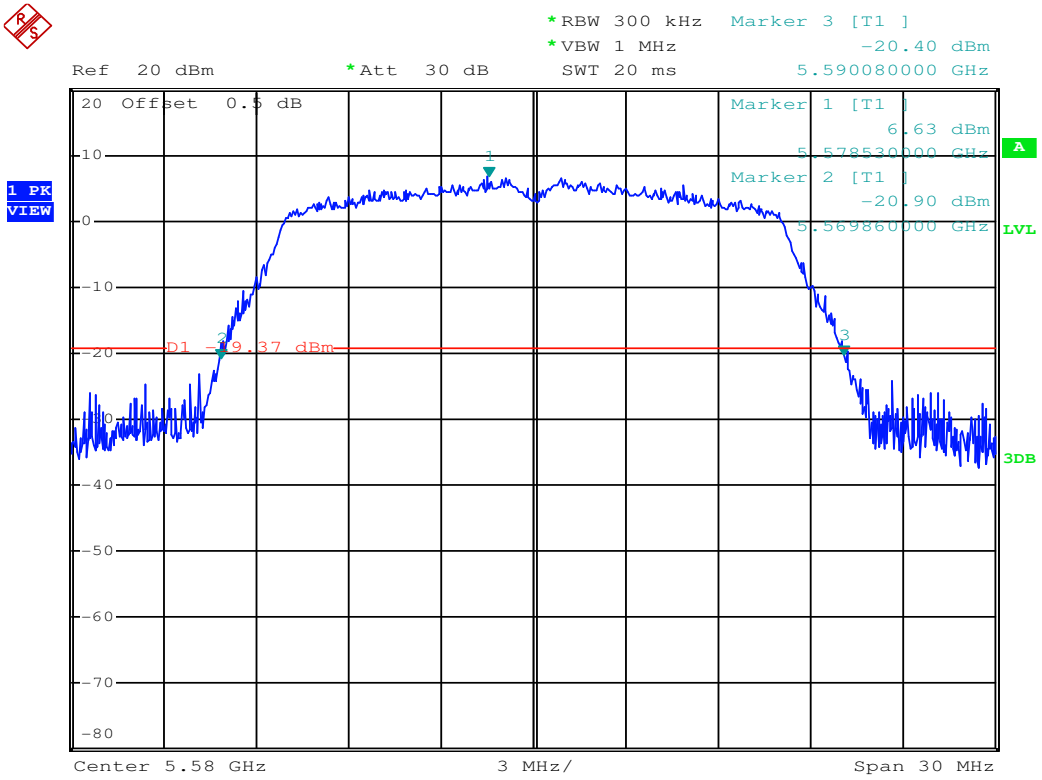
Emission Bandwidth Measurement_11A_5500_Ant1



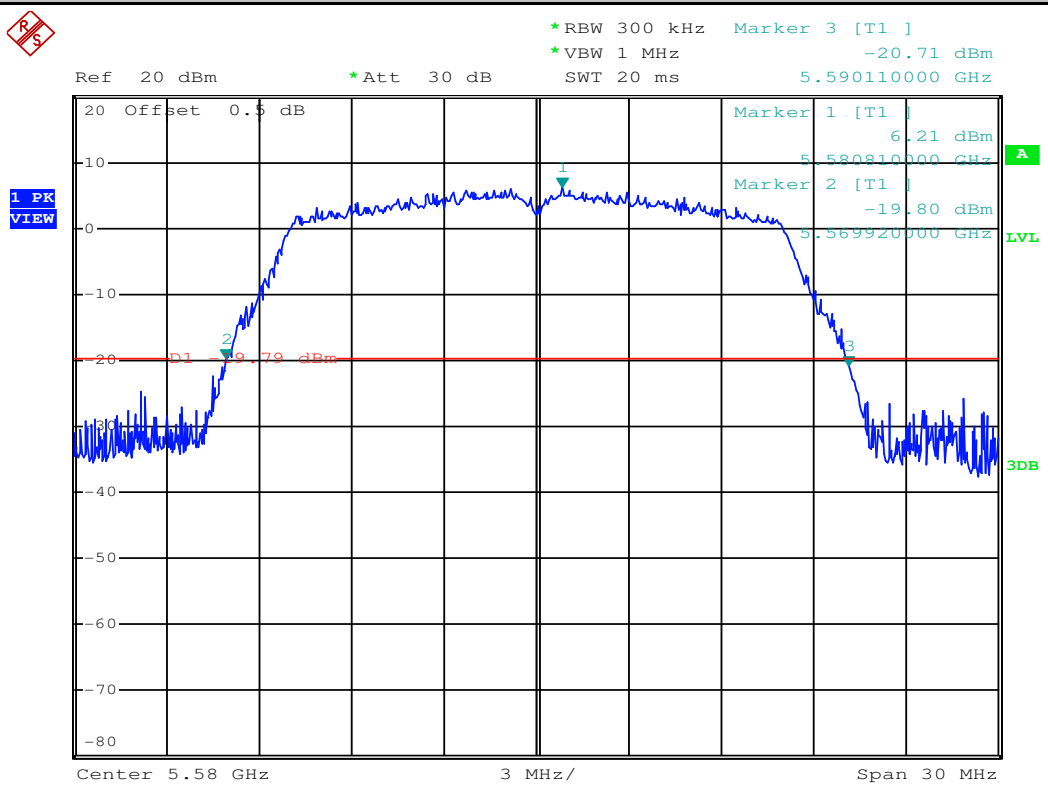
Emission Bandwidth Measurement_11A_5500_Ant2



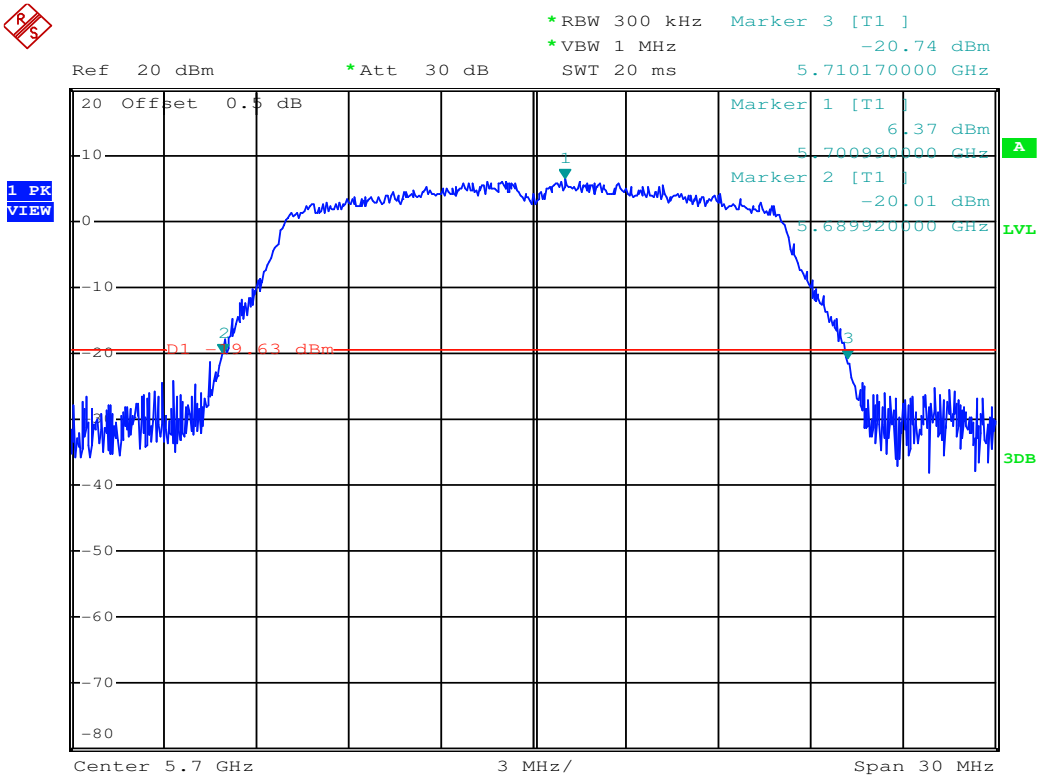
Emission Bandwidth Measurement_11A_5580_Ant1



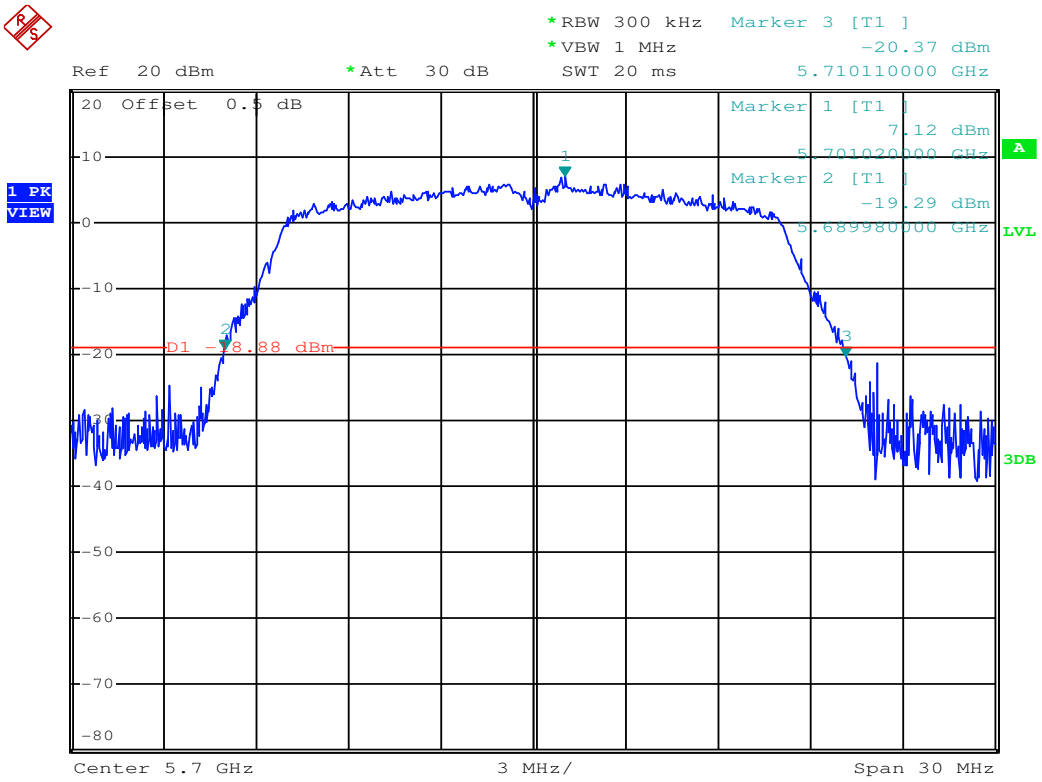
Emission Bandwidth Measurement_11A_5580_Ant2



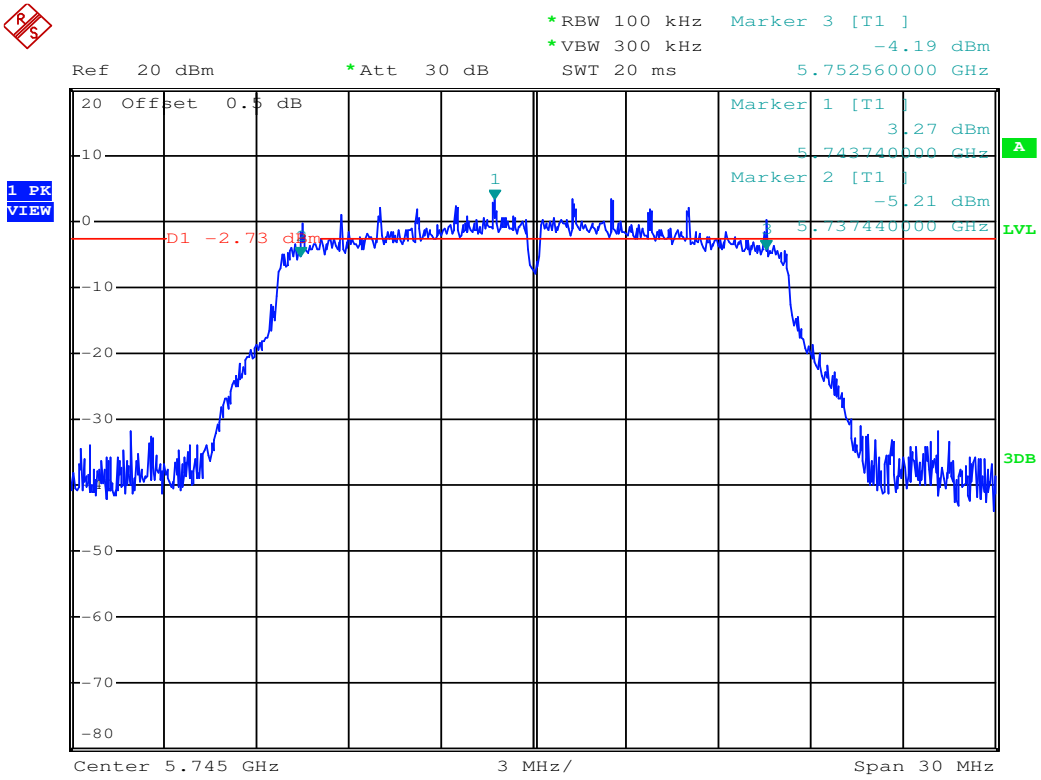
Emission Bandwidth Measurement_11A_5700_Ant1



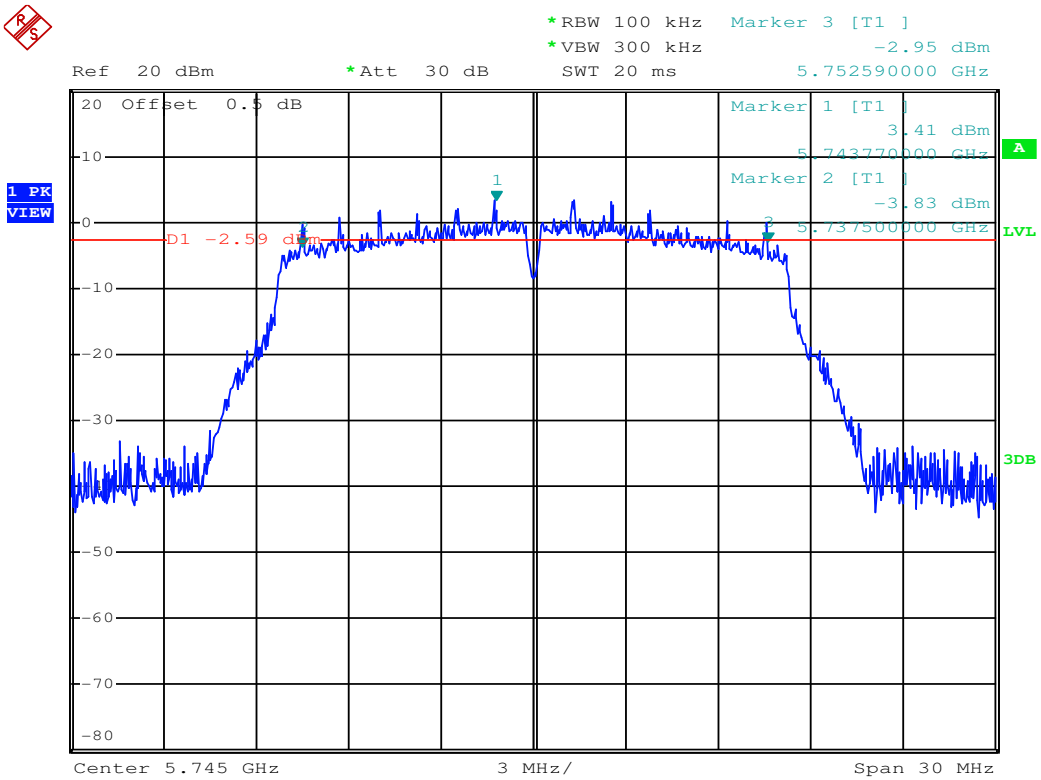
Emission Bandwidth Measurement_11A_5700_Ant2



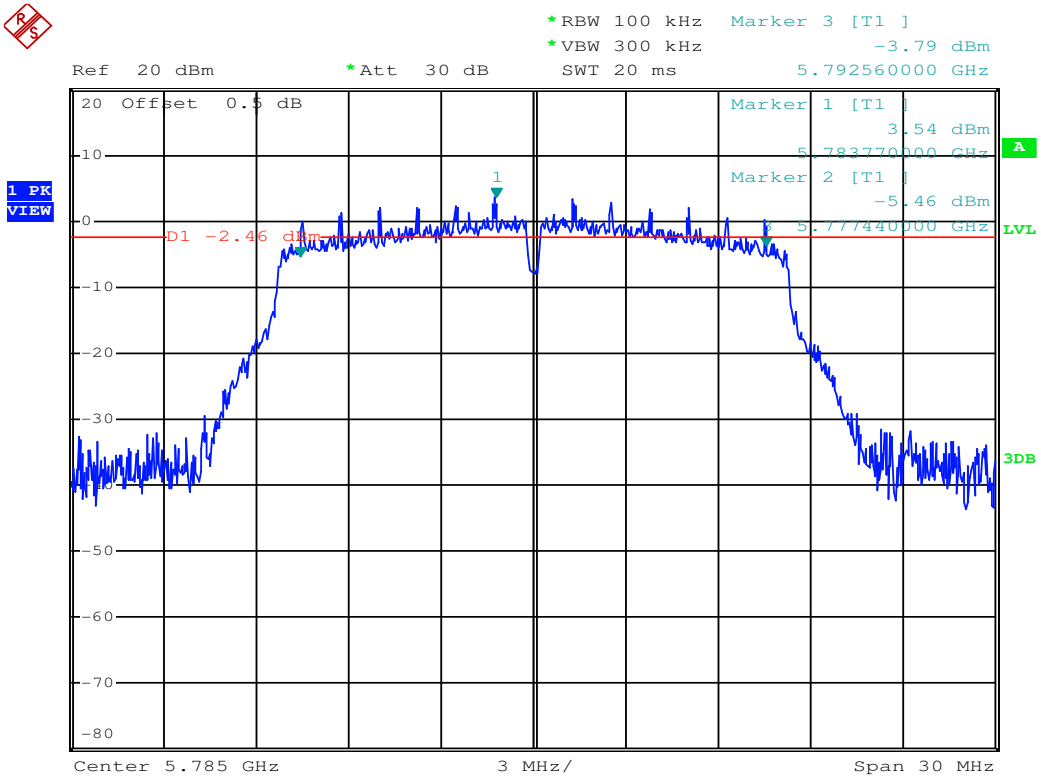
Emission Bandwidth Measurement_11A_5745_Ant1



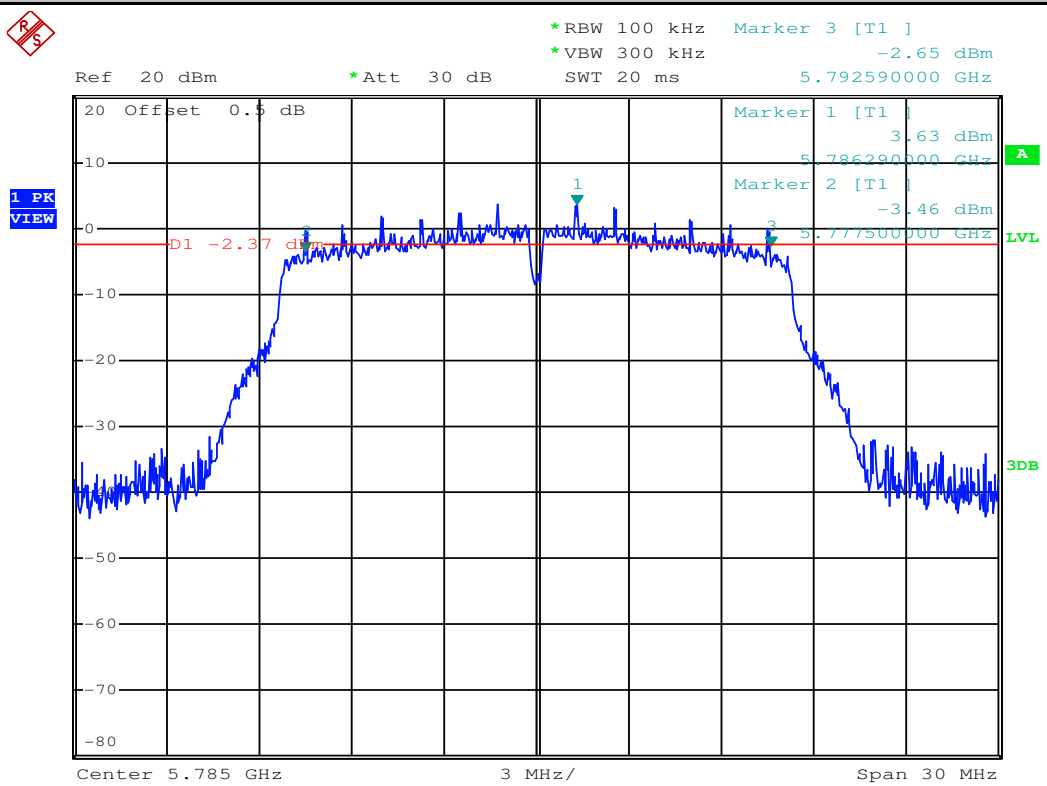
Emission Bandwidth Measurement_11A_5745_Ant2



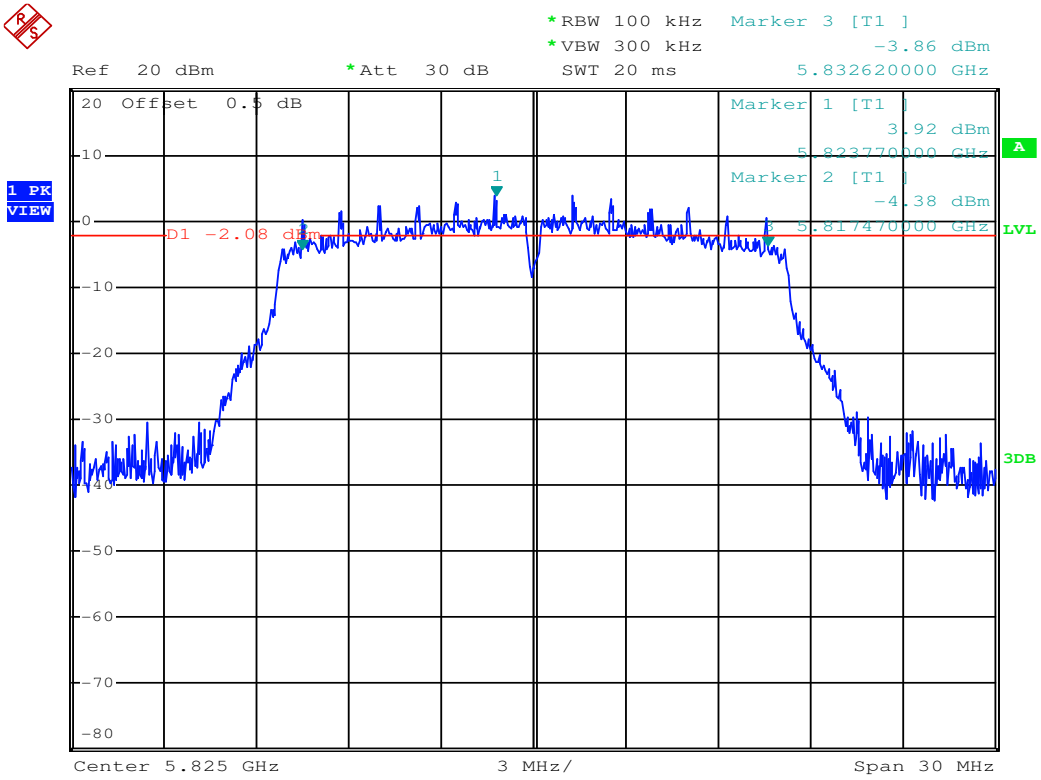
Emission Bandwidth Measurement_11A_5785_Ant1



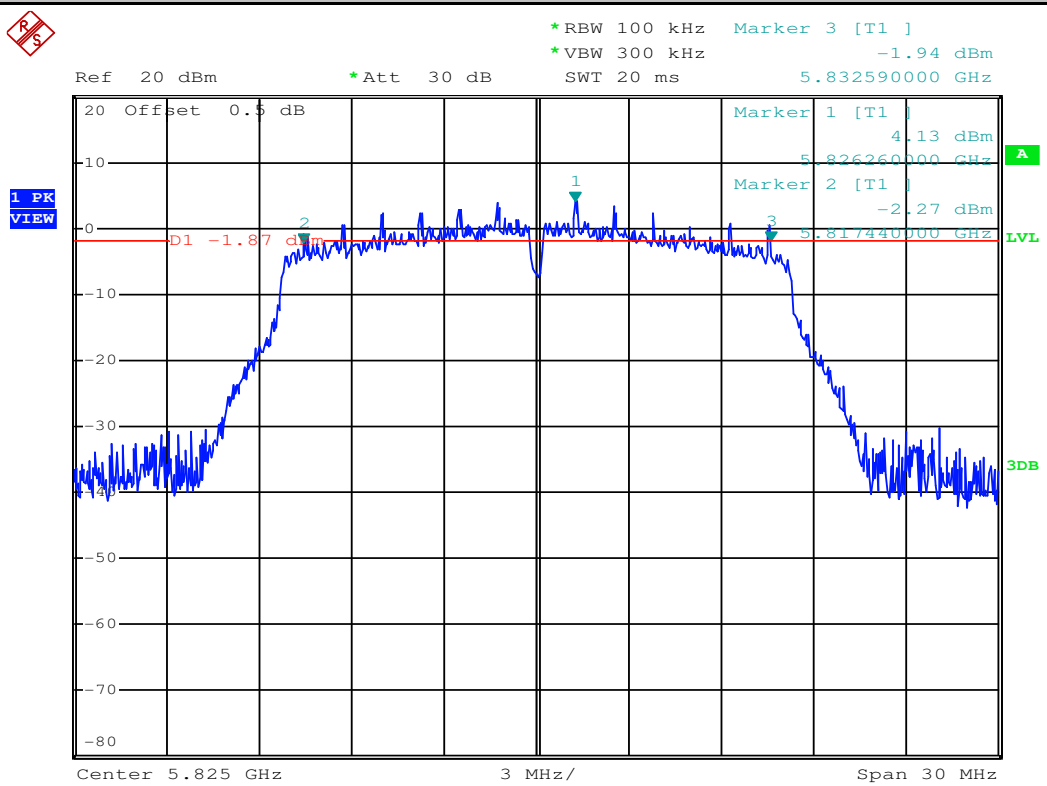
Emission Bandwidth Measurement_11A_5785_Ant2



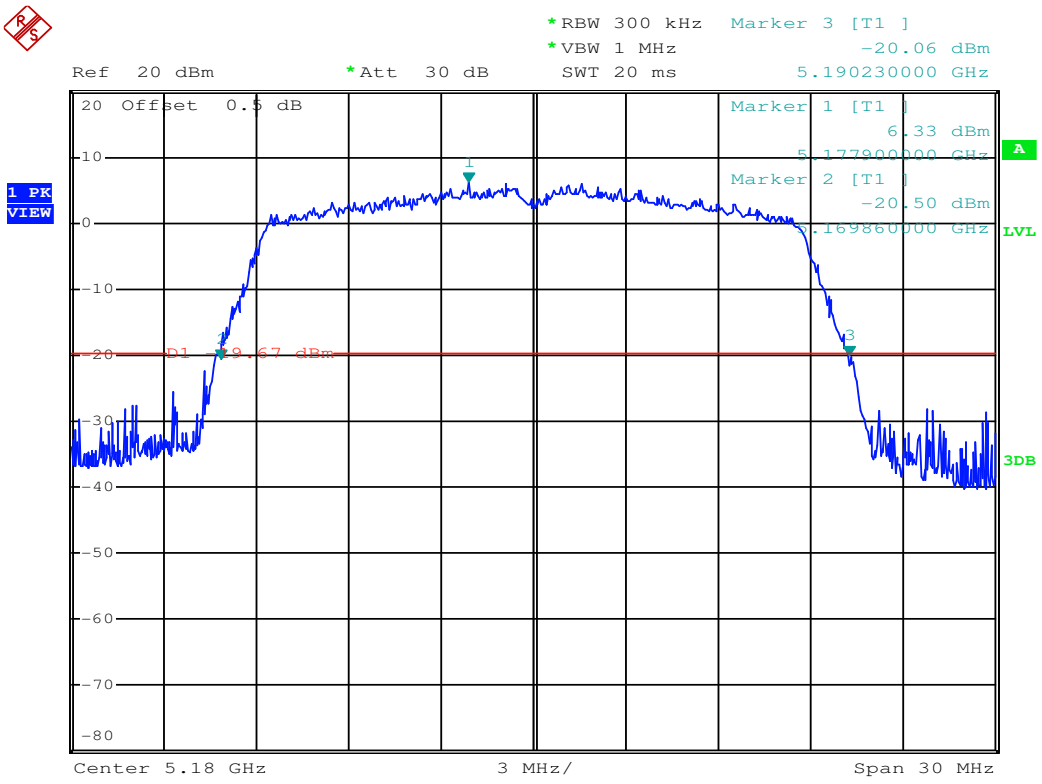
Emission Bandwidth Measurement_11A_5825_Ant1



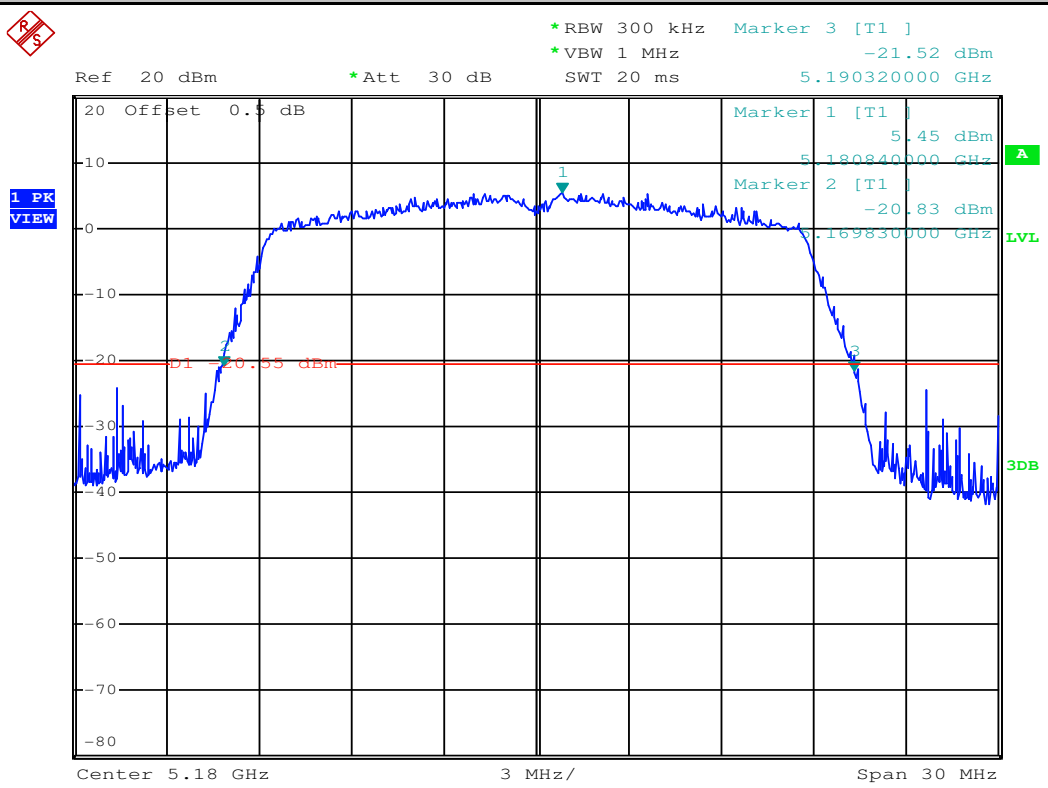
Emission Bandwidth Measurement_11A_5825_Ant2



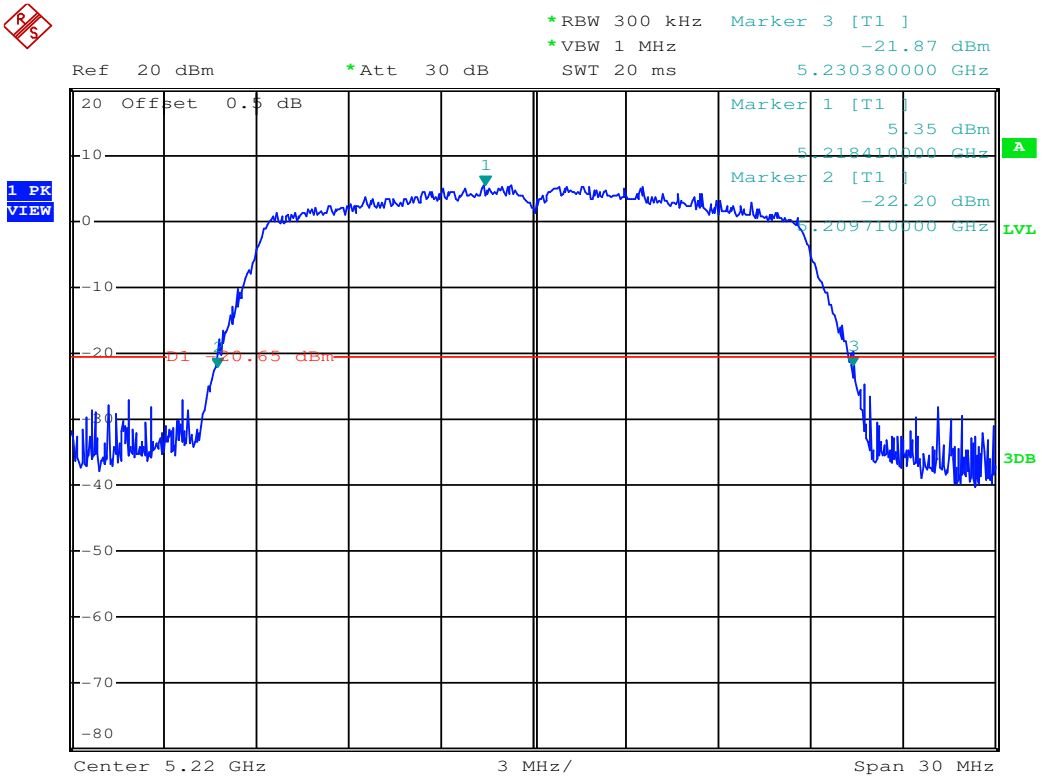
Emission Bandwidth Measurement_11N20_5180_Ant1



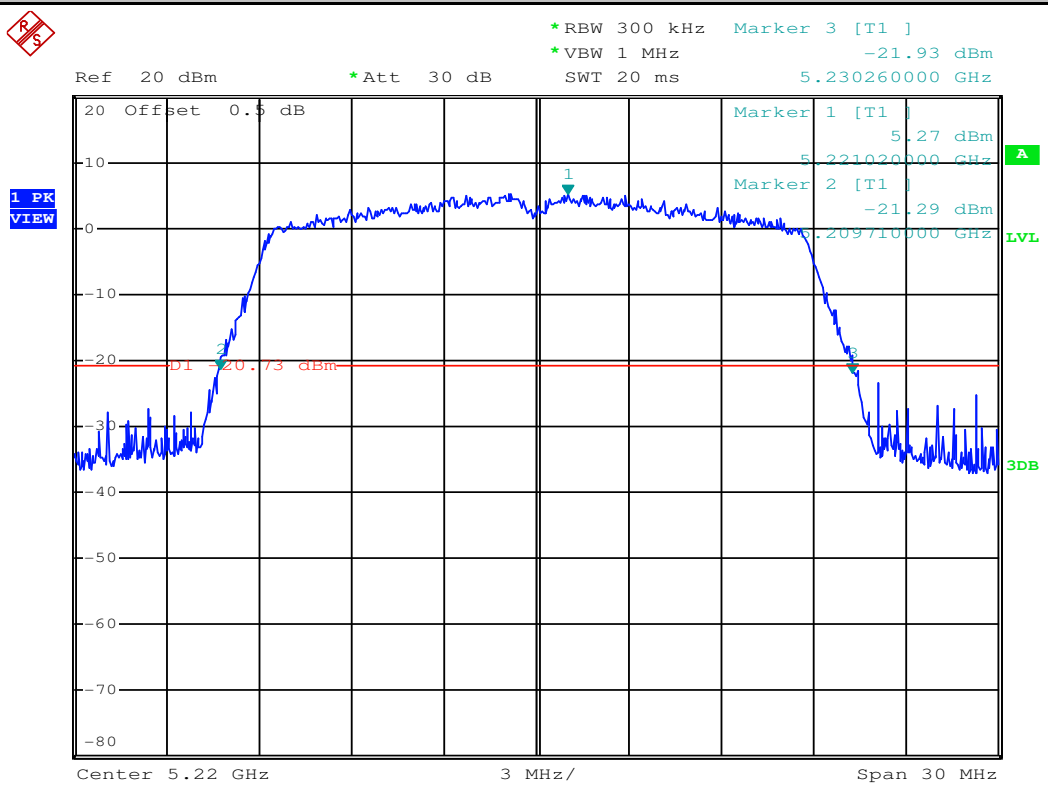
Emission Bandwidth Measurement_11N20_5180_Ant2



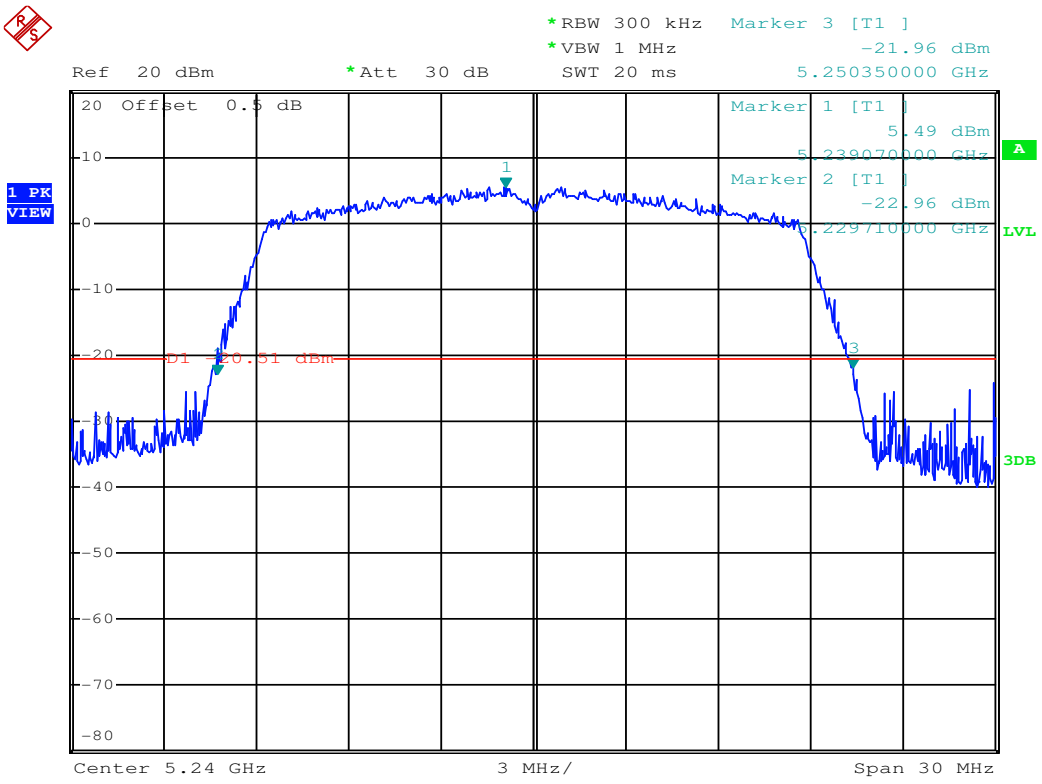
Emission Bandwidth Measurement_11N20_5220_Ant1



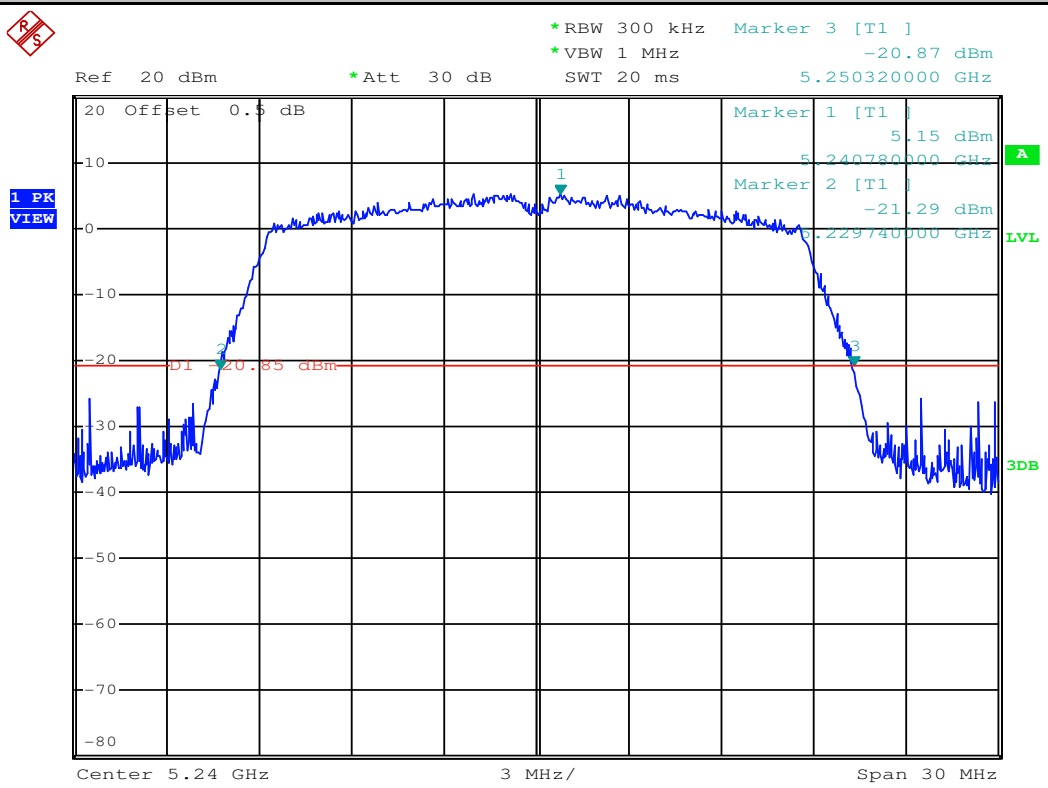
Emission Bandwidth Measurement_11N20_5220_Ant2



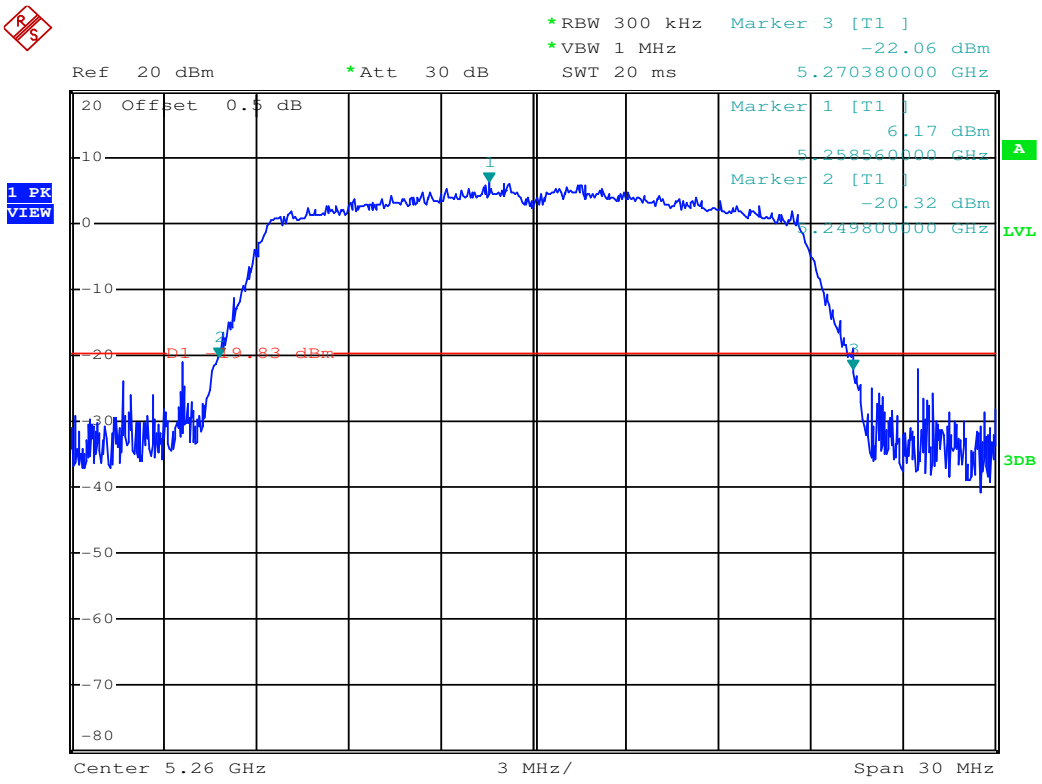
Emission Bandwidth Measurement_11N20_5240_Ant1



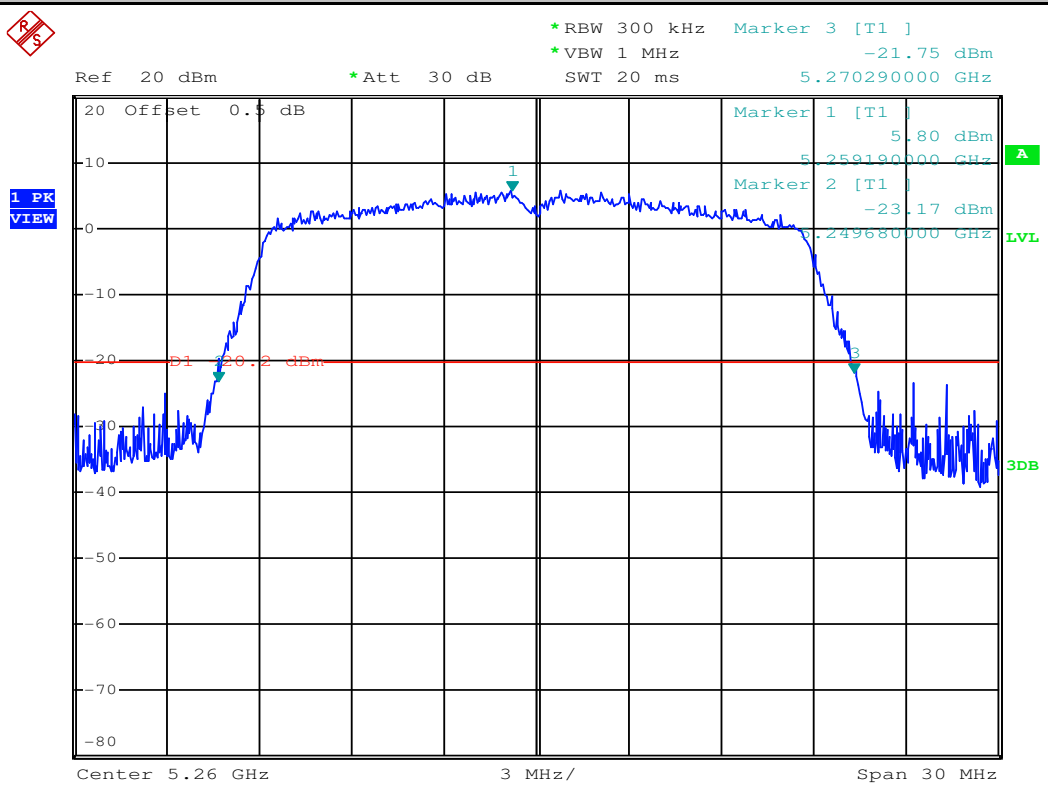
Emission Bandwidth Measurement_11N20_5240_Ant2



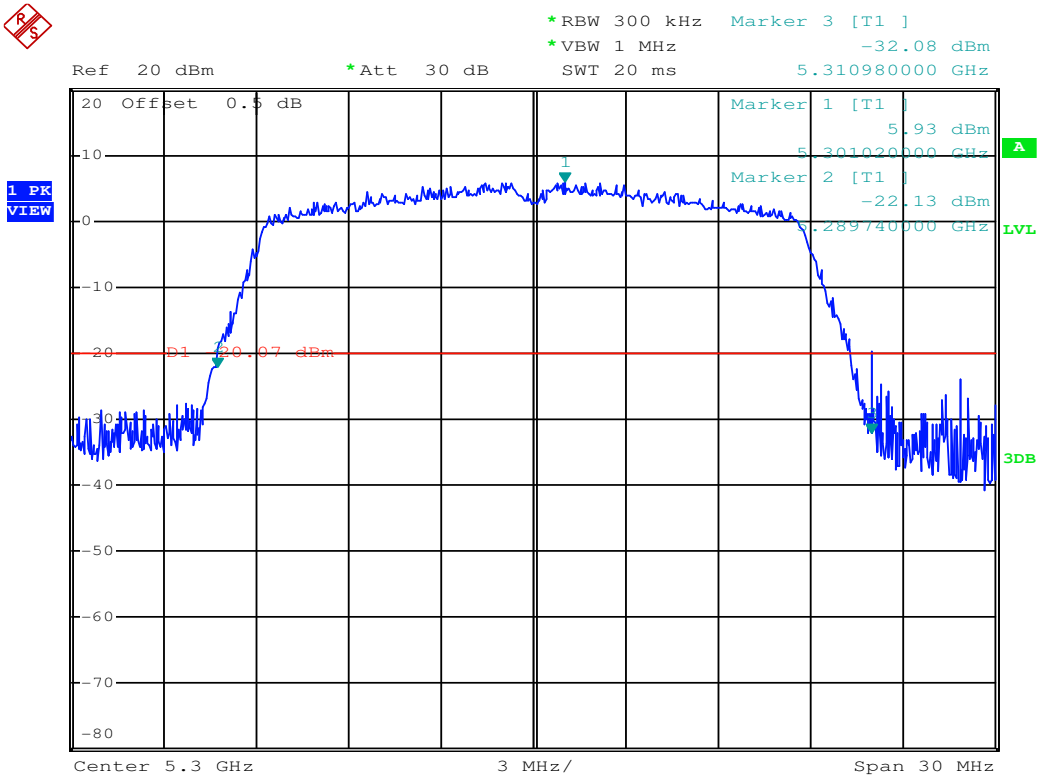
Emission Bandwidth Measurement_11N20_5260_Ant1



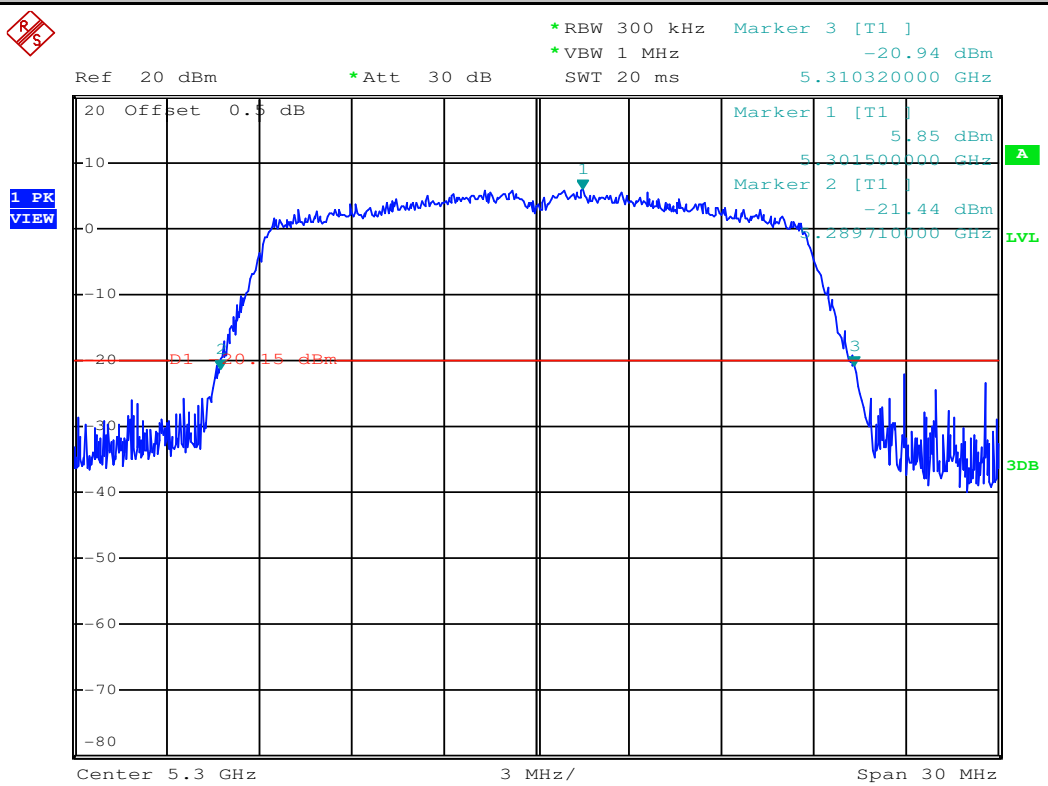
Emission Bandwidth Measurement_11N20_5260_Ant2



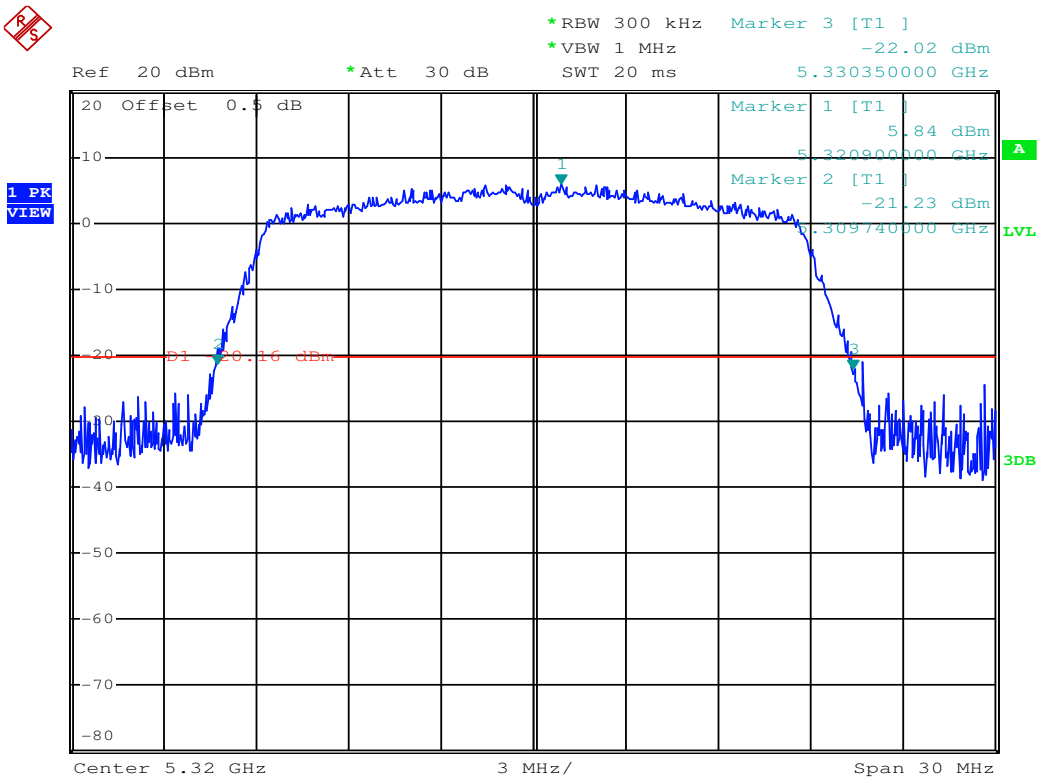
Emission Bandwidth Measurement_11N20_5300_Ant1



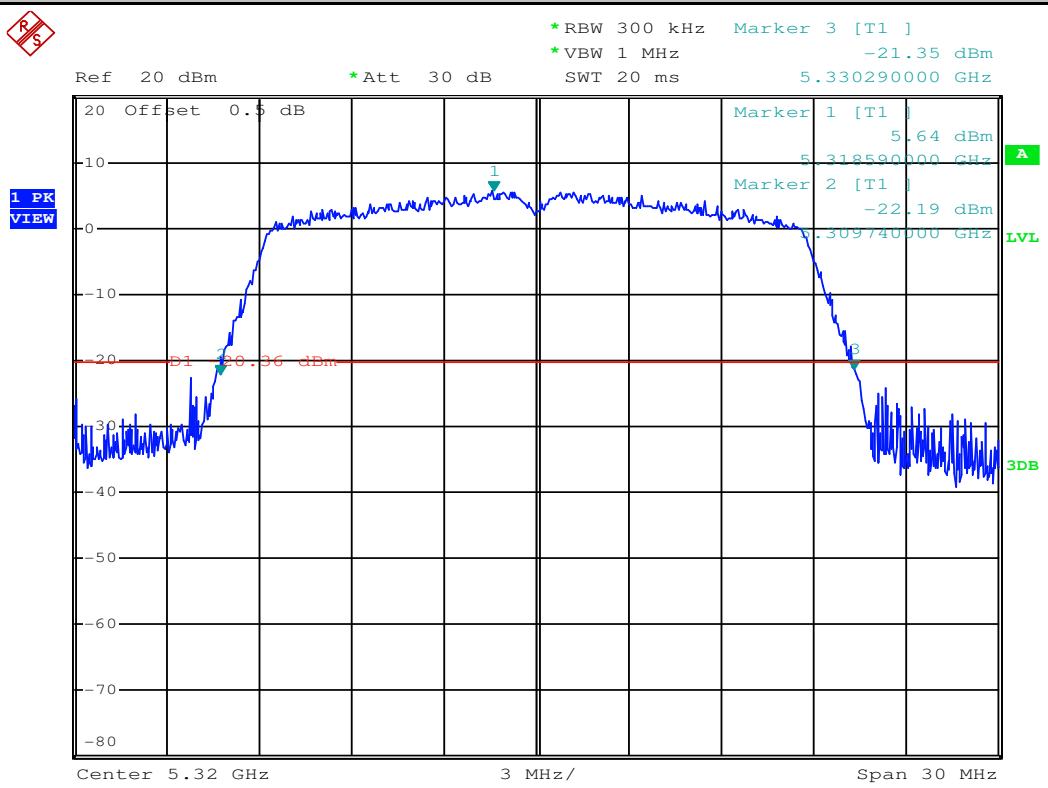
Emission Bandwidth Measurement_11N20_5300_Ant2



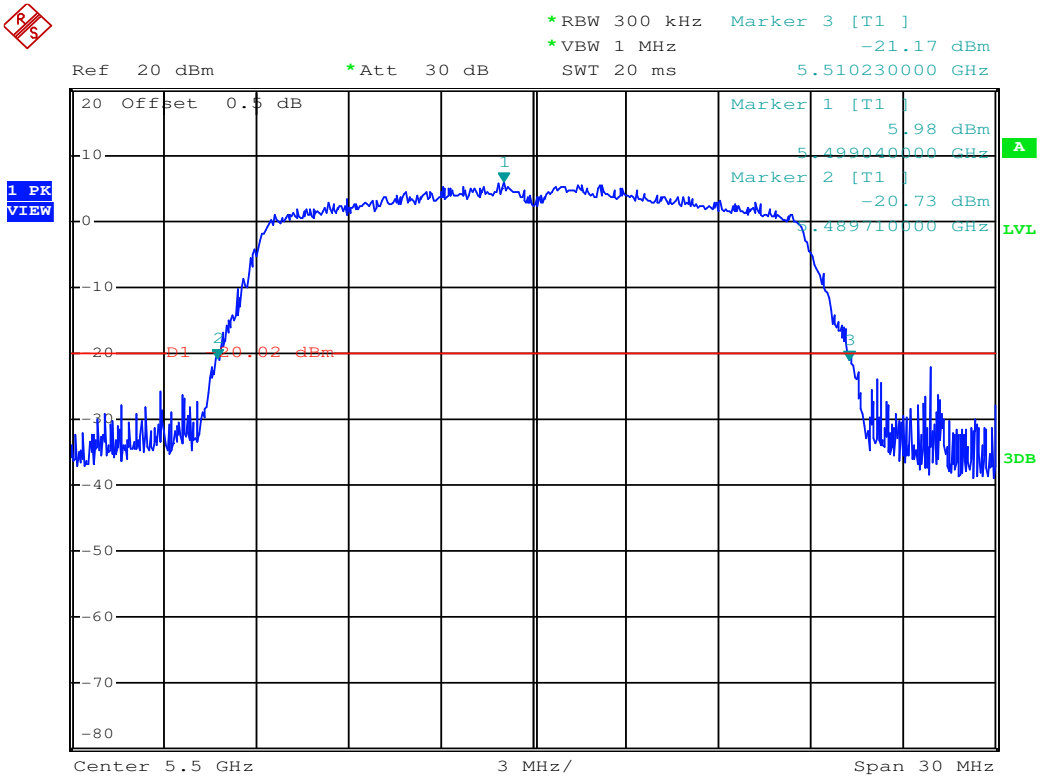
Emission Bandwidth Measurement_11N20_5320_Ant1



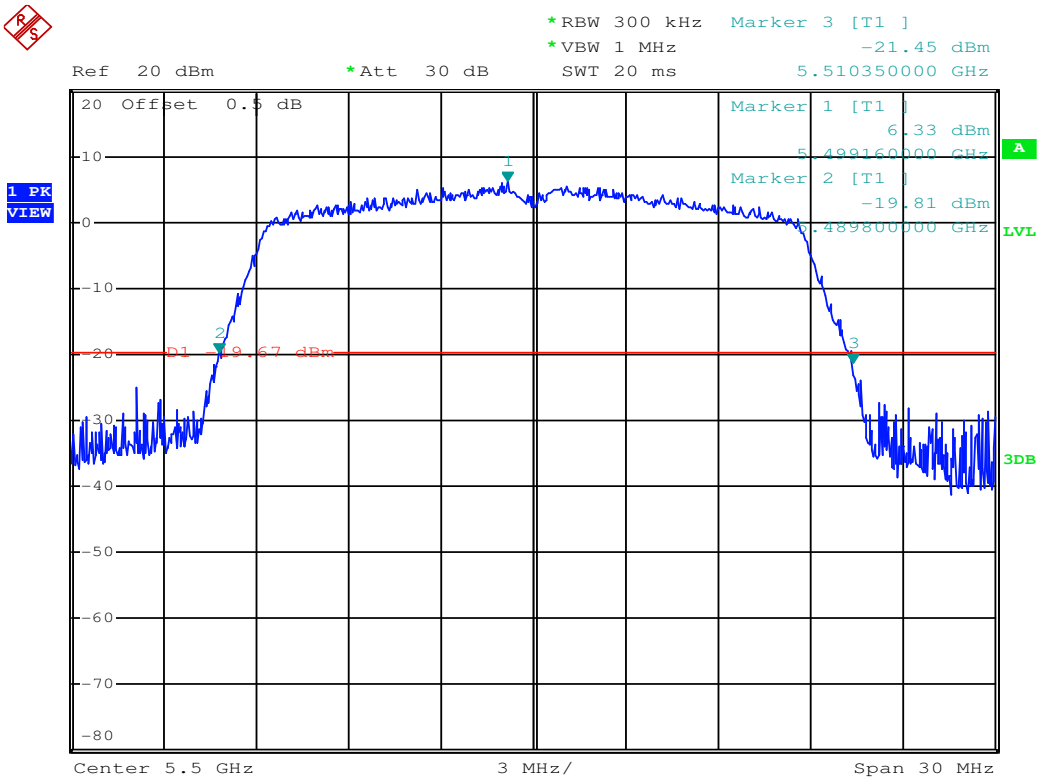
Emission Bandwidth Measurement_11N20_5320_Ant2



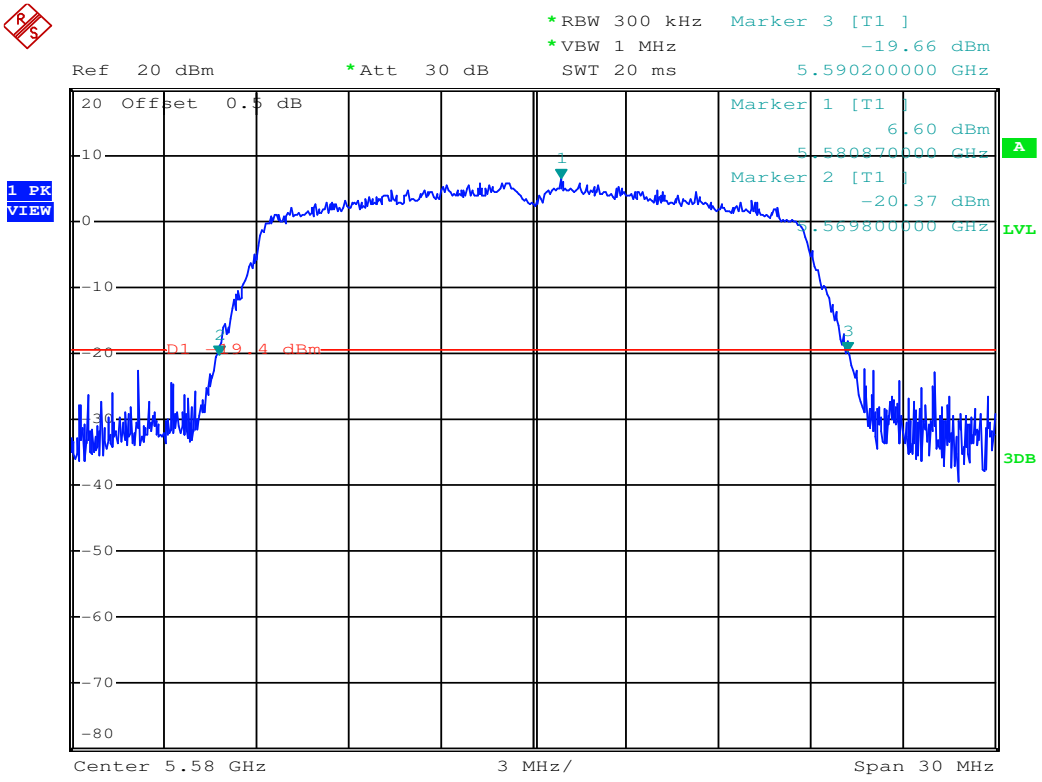
Emission Bandwidth Measurement_11N20_5500_Ant1



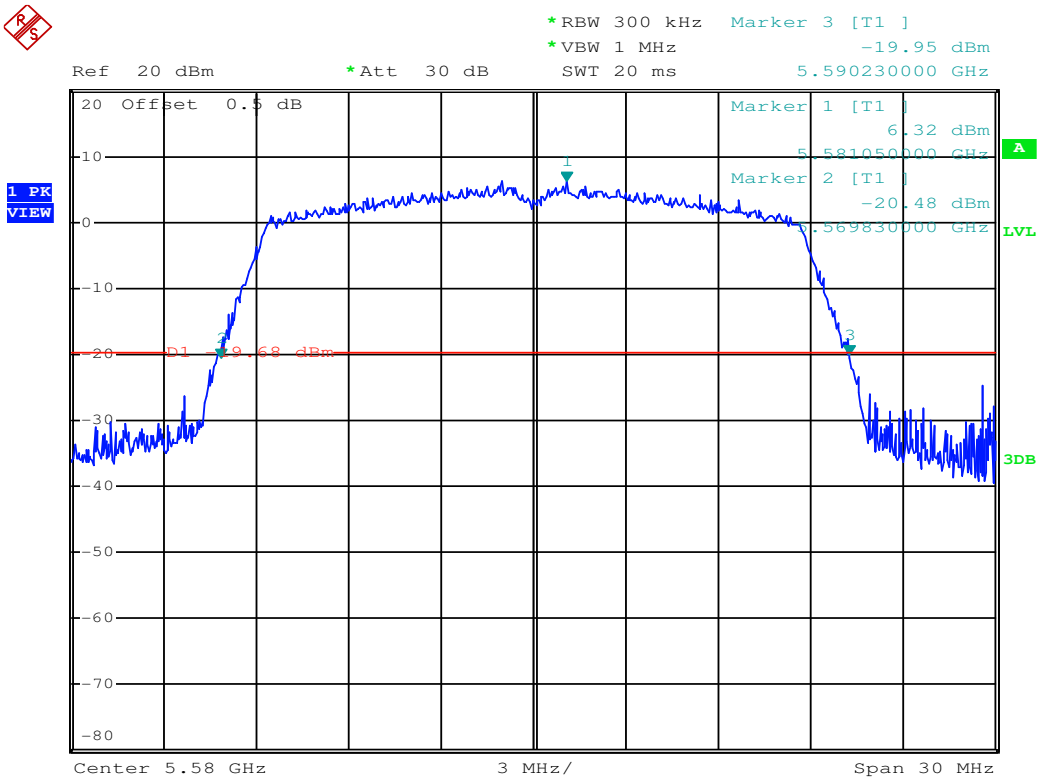
Emission Bandwidth Measurement_11N20_5500_Ant2



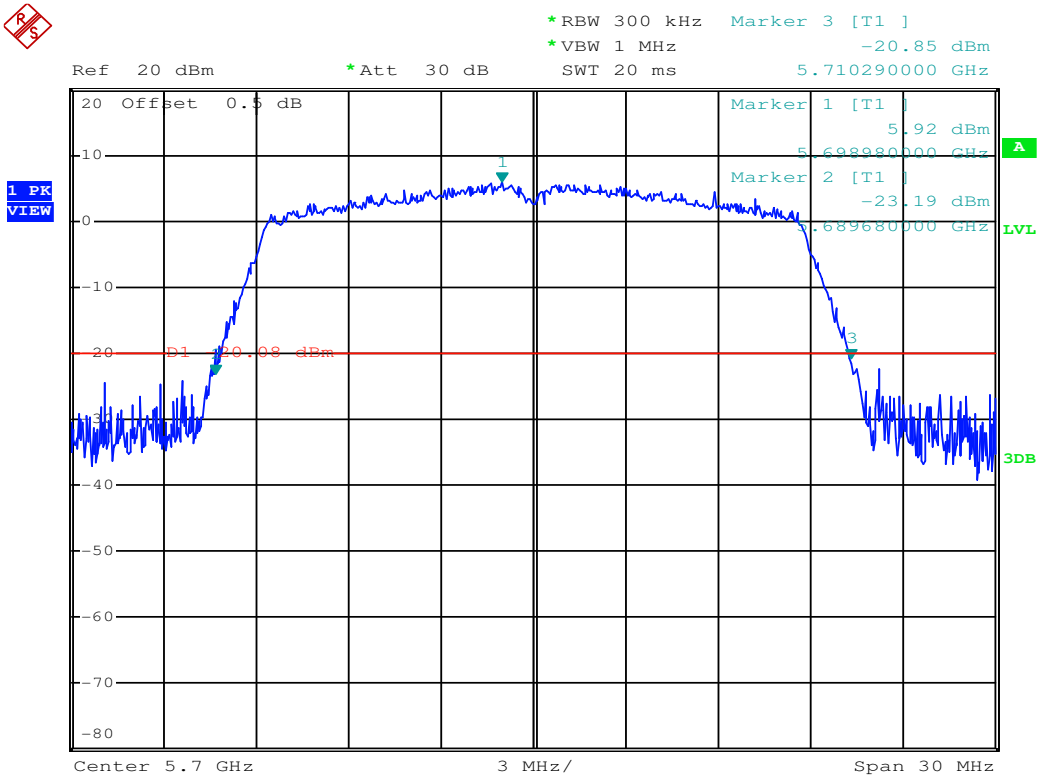
Emission Bandwidth Measurement_11N20_5580_Ant1



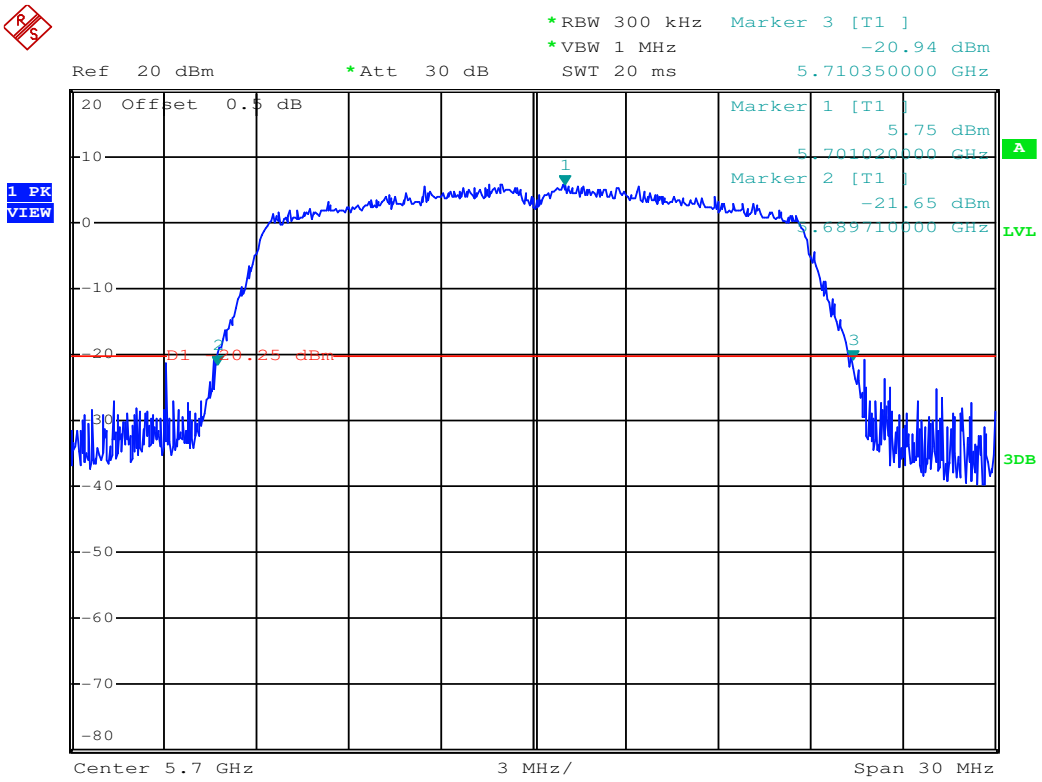
Emission Bandwidth Measurement_11N20_5580_Ant2



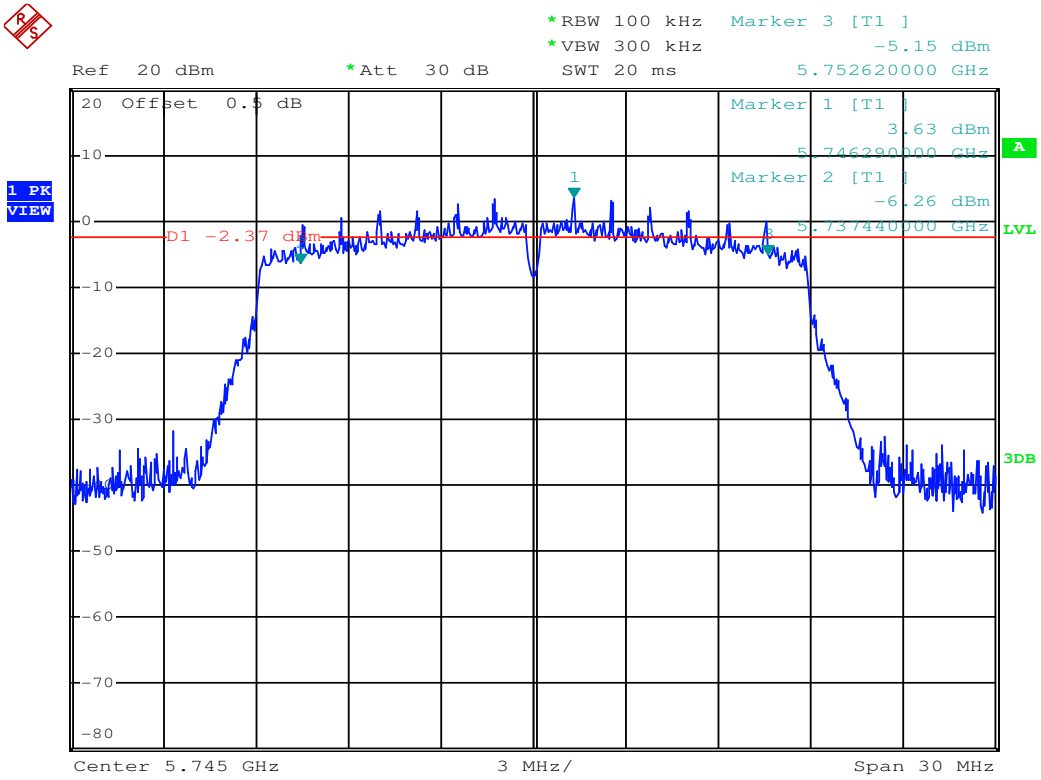
Emission Bandwidth Measurement_11N20_5700_Ant1



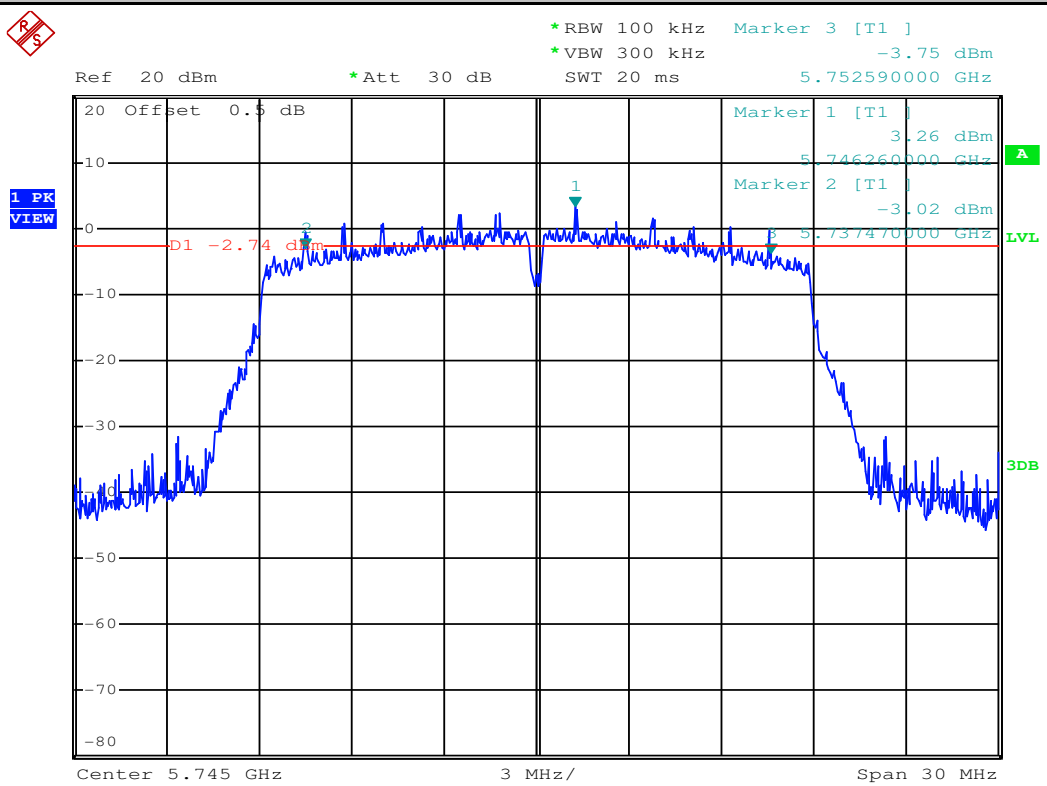
Emission Bandwidth Measurement_11N20_5700_Ant2



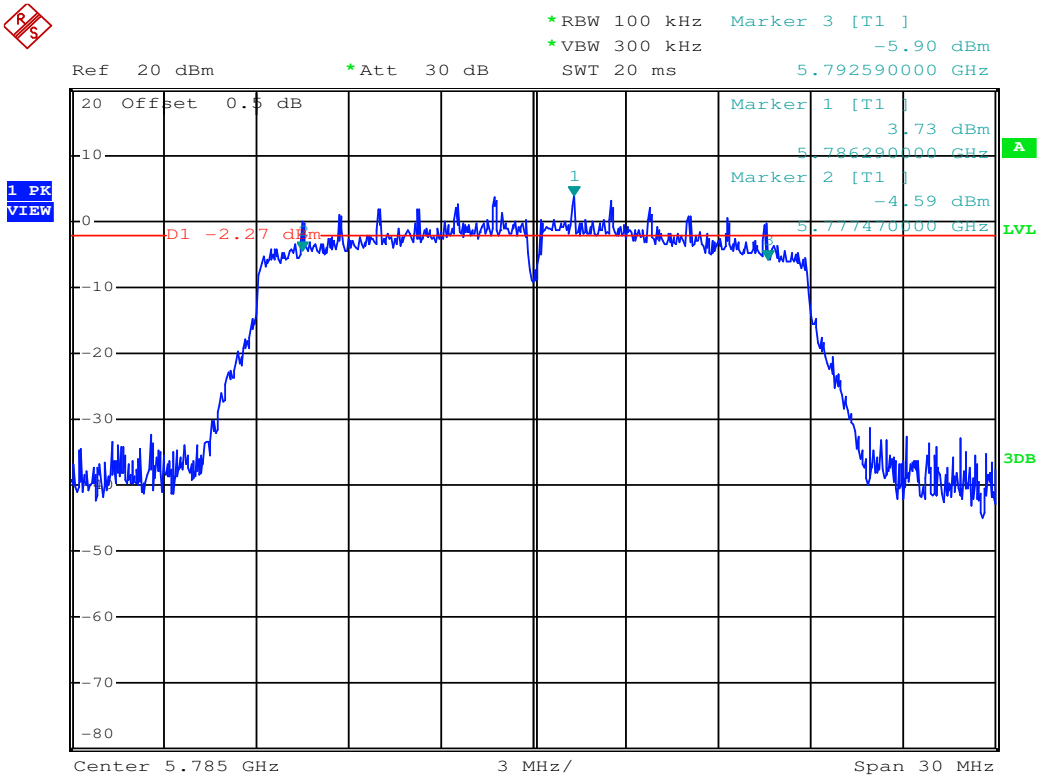
Emission Bandwidth Measurement_11N20_5745_Ant1



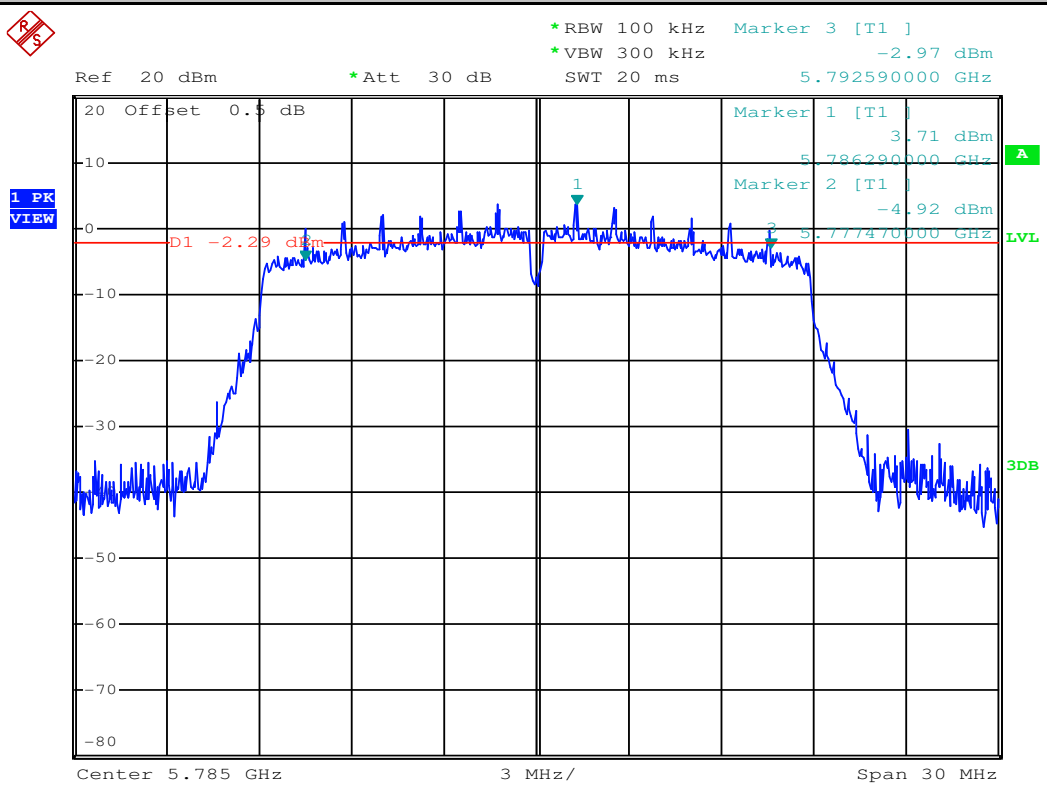
Emission Bandwidth Measurement_11N20_5745_Ant2



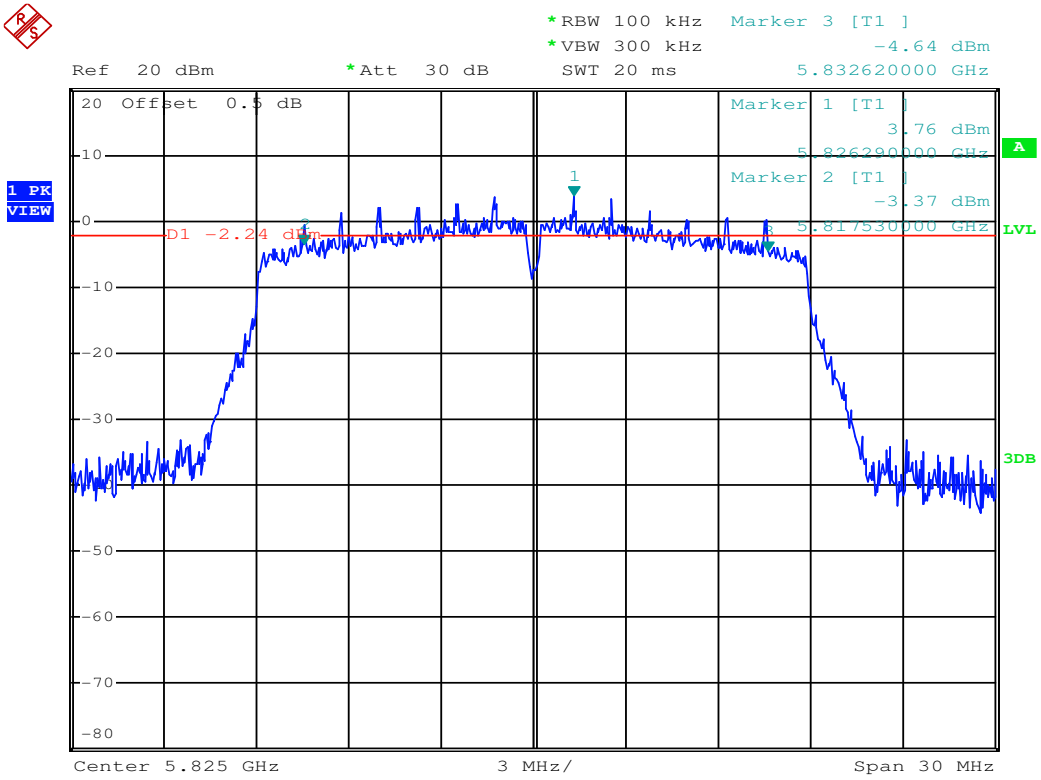
Emission Bandwidth Measurement_11N20_5785_Ant1



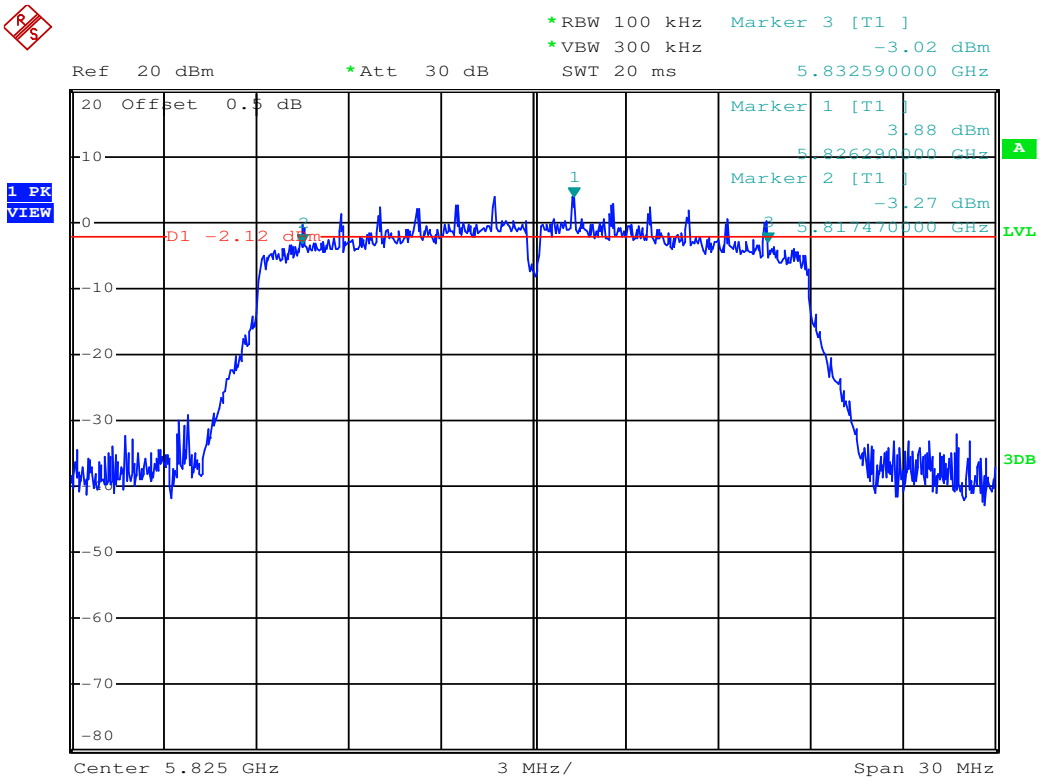
Emission Bandwidth Measurement_11N20_5785_Ant2



Emission Bandwidth Measurement_11N20_5825_Ant1



Emission Bandwidth Measurement_11N20_5825_Ant2

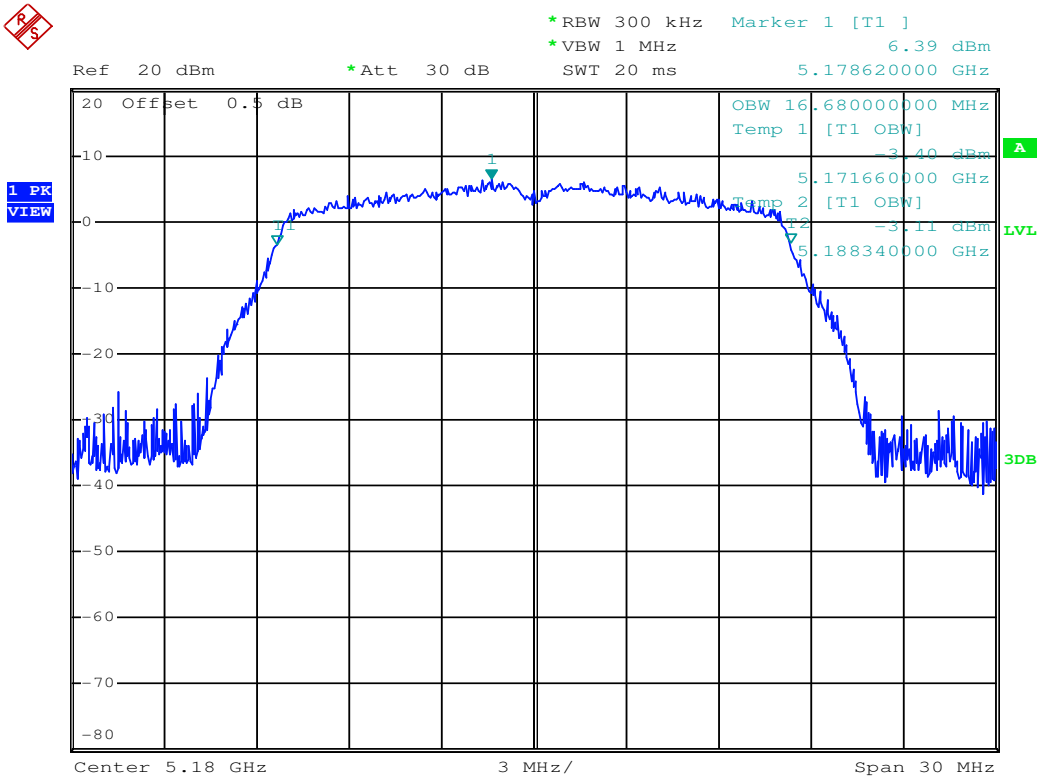


2.Occupied Bandwidth Measurement

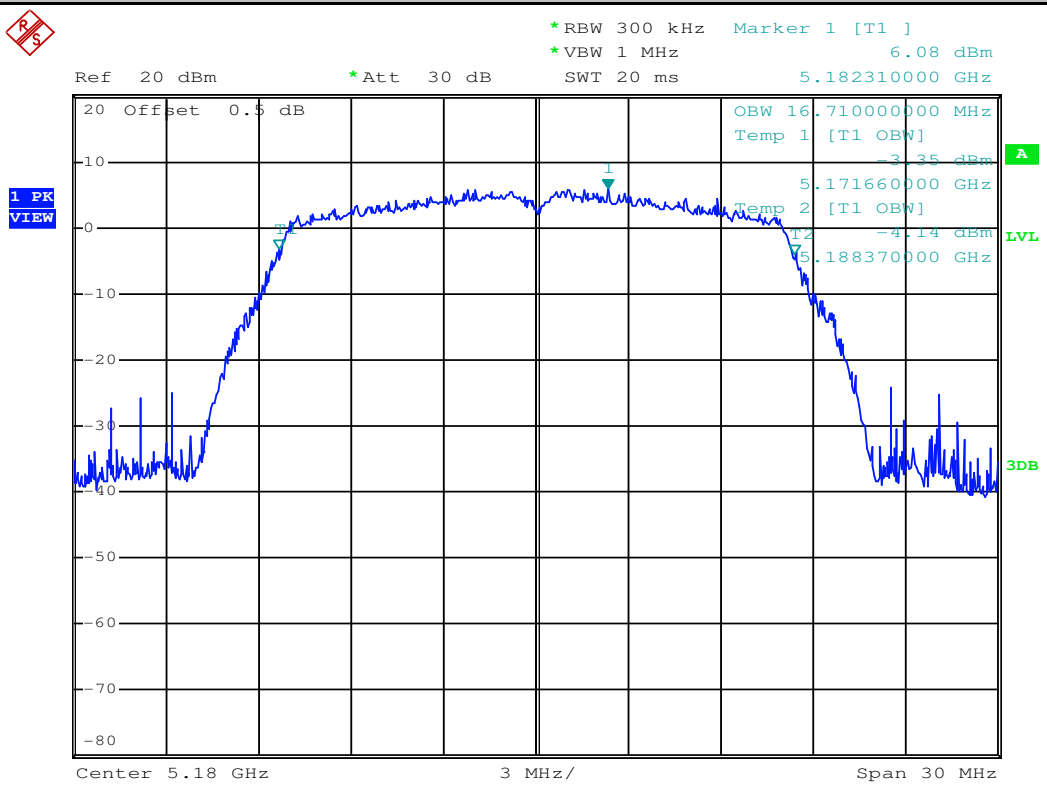
Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict
11A	5180	Ant1	16.680	---	PASS
11A	5180	Ant2	16.710	---	PASS
11A	5220	Ant1	16.710	---	PASS
11A	5220	Ant2	16.650	---	PASS
11A	5240	Ant1	16.710	---	PASS
11A	5240	Ant2	16.680	---	PASS
11A	5260	Ant1	16.650	---	PASS
11A	5260	Ant2	16.680	---	PASS
11A	5300	Ant1	16.650	---	PASS
11A	5300	Ant2	16.680	---	PASS
11A	5320	Ant1	16.680	---	PASS
11A	5320	Ant2	16.680	---	PASS
11A	5500	Ant1	16.650	---	PASS
11A	5500	Ant2	16.680	---	PASS
11A	5580	Ant1	16.680	---	PASS
11A	5580	Ant2	16.680	---	PASS
11A	5700	Ant1	16.710	---	PASS
11A	5700	Ant2	16.680	---	PASS
11A	5745	Ant1	16.680	---	PASS
11A	5745	Ant2	16.650	---	PASS
11A	5785	Ant1	16.680	---	PASS
11A	5785	Ant2	16.650	---	PASS
11A	5825	Ant1	16.740	---	PASS
11A	5825	Ant2	16.740	---	PASS
11N20	5180	Ant1	17.670	---	PASS
11N20	5180	Ant2	17.670	---	PASS
11N20	5220	Ant1	17.700	---	PASS
11N20	5220	Ant2	17.730	---	PASS
11N20	5240	Ant1	17.700	---	PASS
11N20	5240	Ant2	17.670	---	PASS
11N20	5260	Ant1	17.670	---	PASS
11N20	5260	Ant2	17.700	---	PASS

11N20	5300	Ant1	17.670	---	PASS
11N20	5300	Ant2	17.670	---	PASS
11N20	5320	Ant1	17.670	---	PASS
11N20	5320	Ant2	17.670	---	PASS
11N20	5500	Ant1	17.670	---	PASS
11N20	5500	Ant2	17.700	---	PASS
11N20	5580	Ant1	17.670	---	PASS
11N20	5580	Ant2	17.700	---	PASS
11N20	5700	Ant1	17.700	---	PASS
11N20	5700	Ant2	17.700	---	PASS
11N20	5745	Ant1	17.700	---	PASS
11N20	5745	Ant2	17.670	---	PASS
11N20	5785	Ant1	17.700	---	PASS
11N20	5785	Ant2	17.700	---	PASS
11N20	5825	Ant1	17.670	---	PASS
11N20	5825	Ant2	17.730	---	PASS

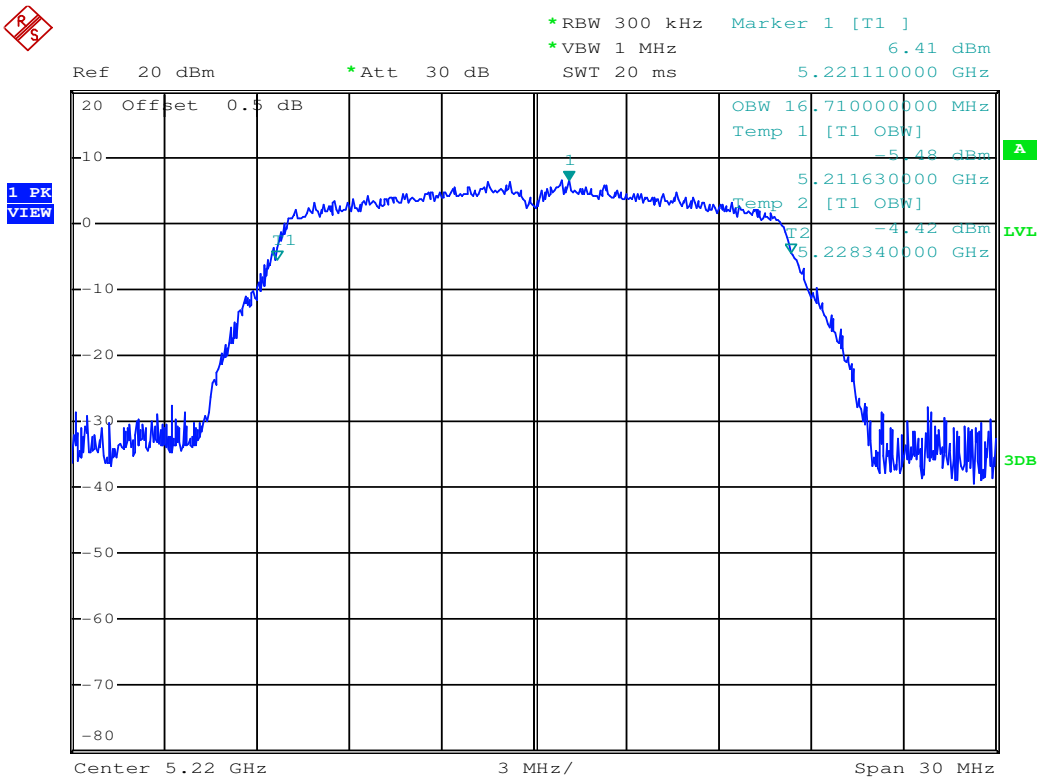
Occupied Bandwidth Measurement_11A_5180_Ant1



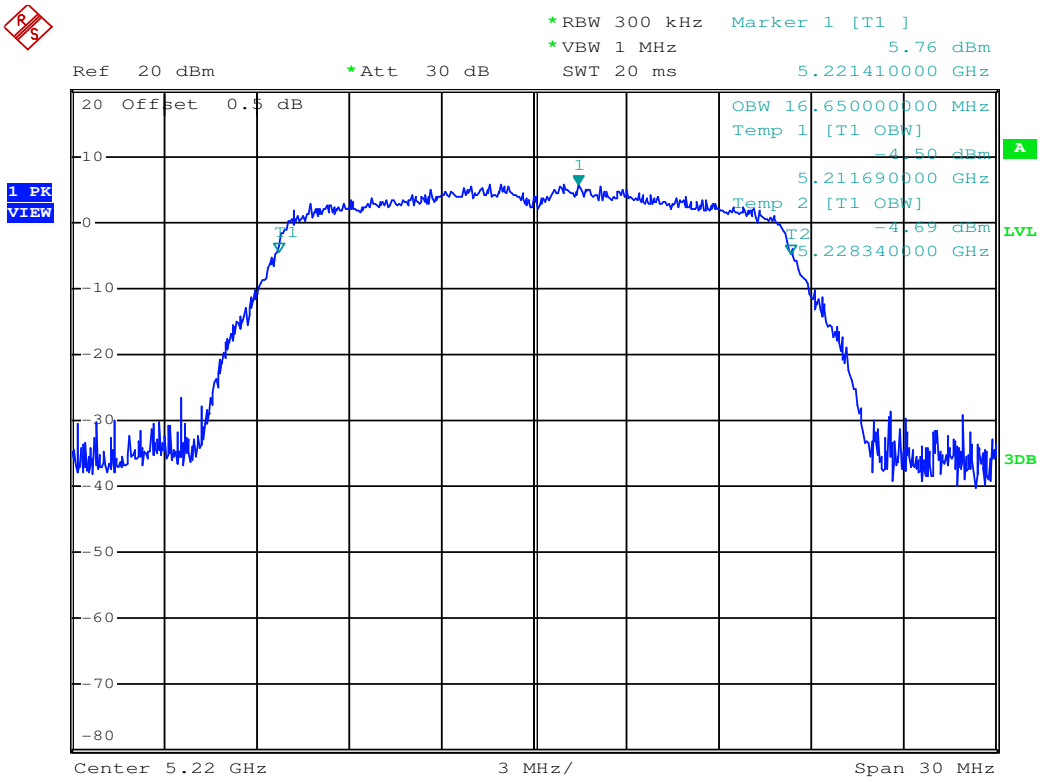
Occupied Bandwidth Measurement_11A_5180_Ant2



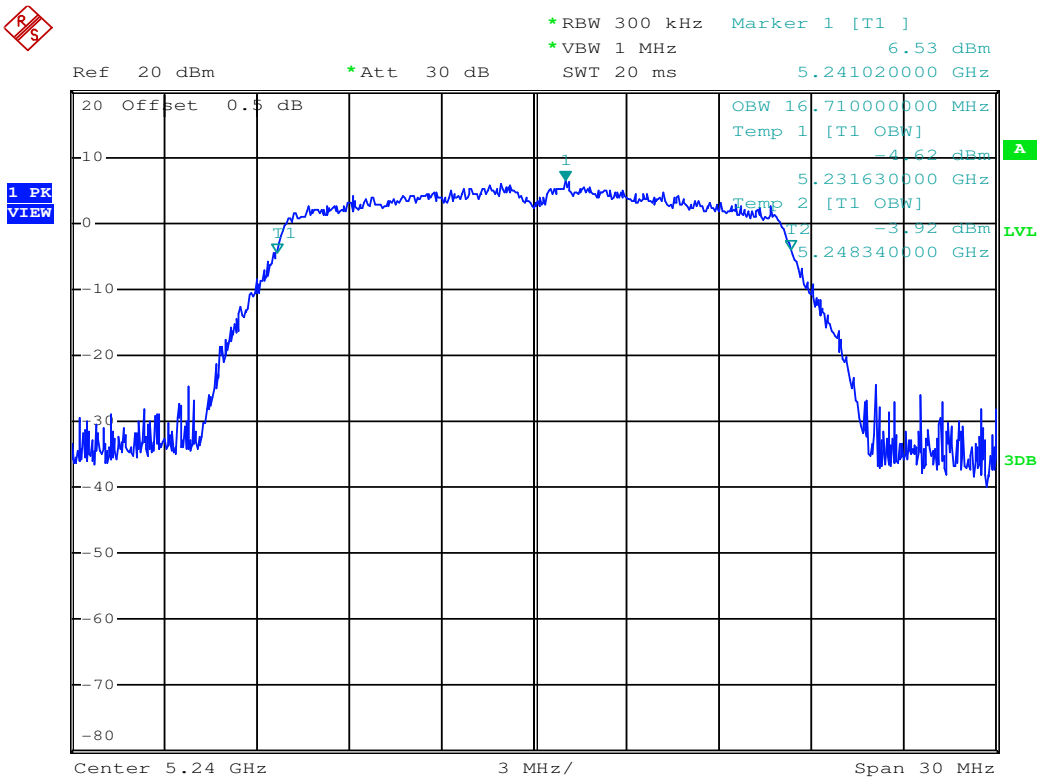
Occupied Bandwidth Measurement_11A_5220_Ant1



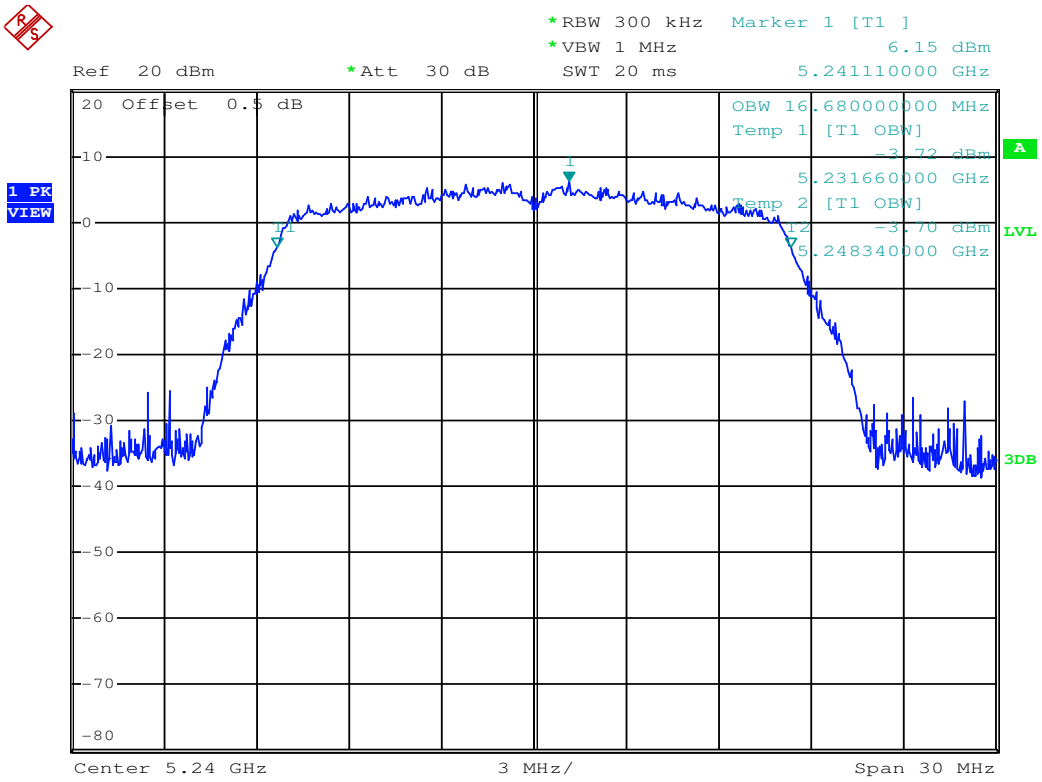
Occupied Bandwidth Measurement_11A_5220_Ant2



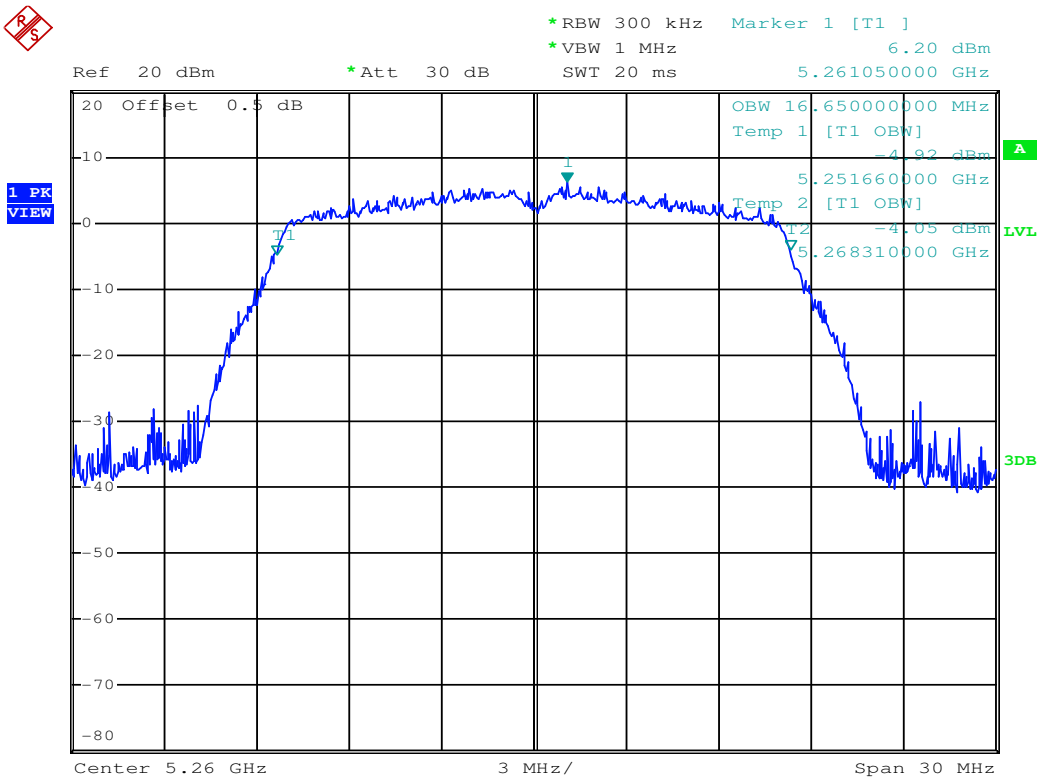
Occupied Bandwidth Measurement_11A_5240_Ant1



Occupied Bandwidth Measurement_11A_5240_Ant2



Occupied Bandwidth Measurement_11A_5260_Ant1



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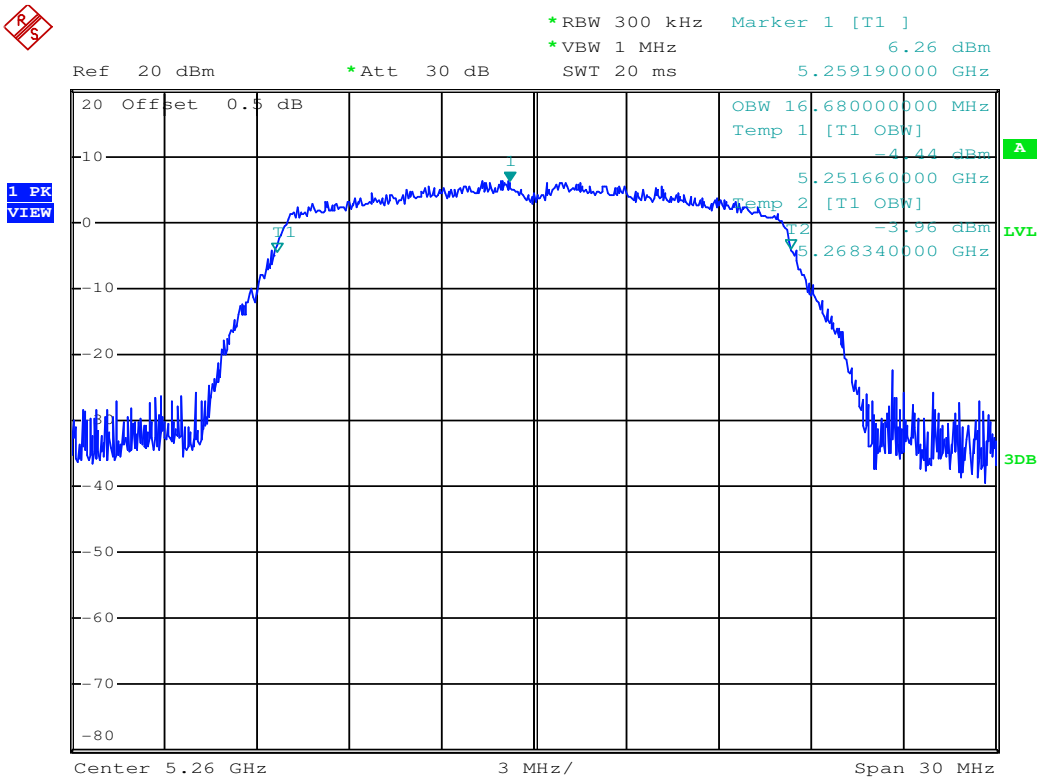
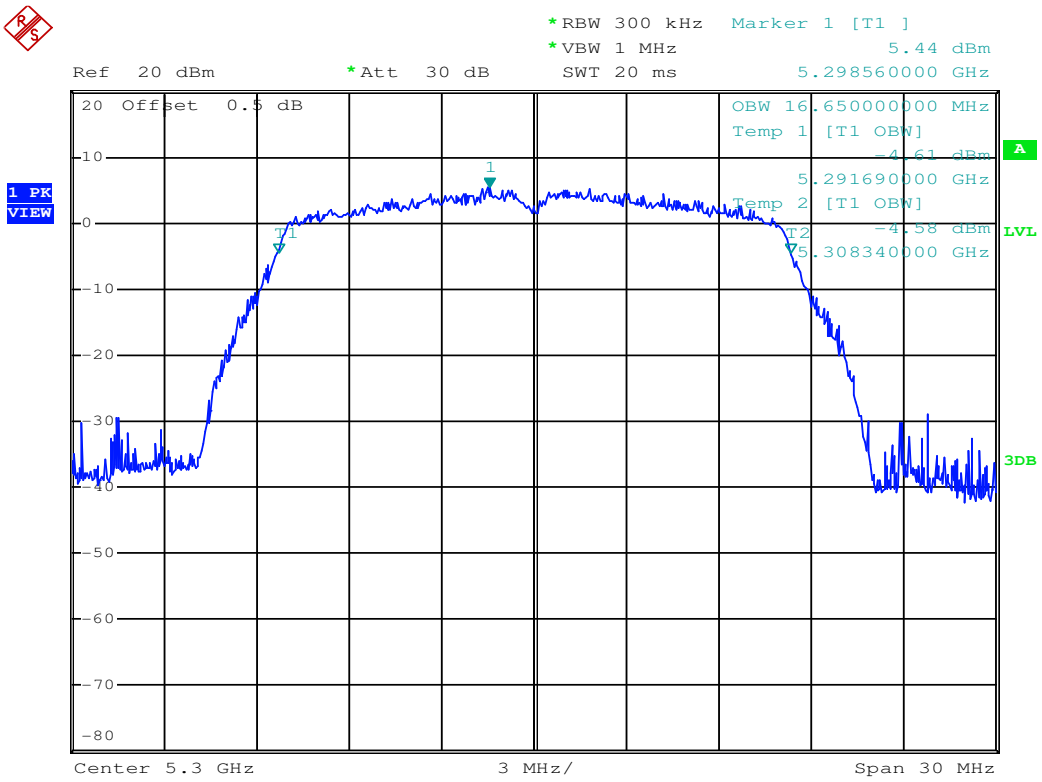


Occupied Bandwidth Measurement_11A_5300_Ant1



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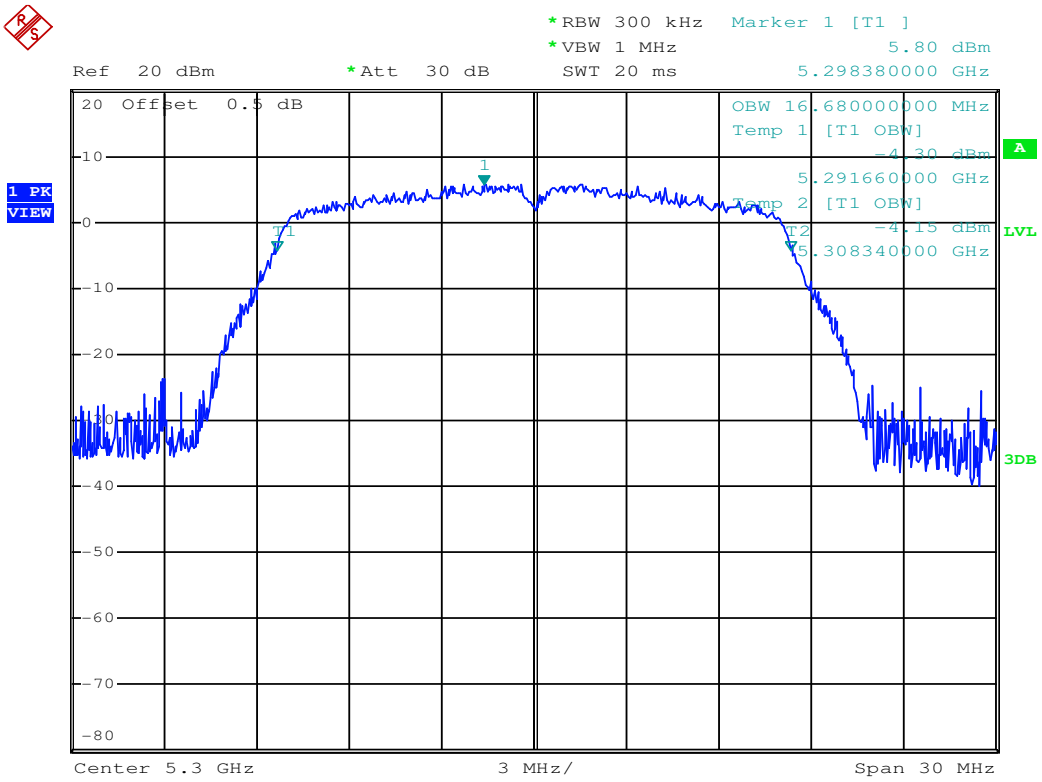

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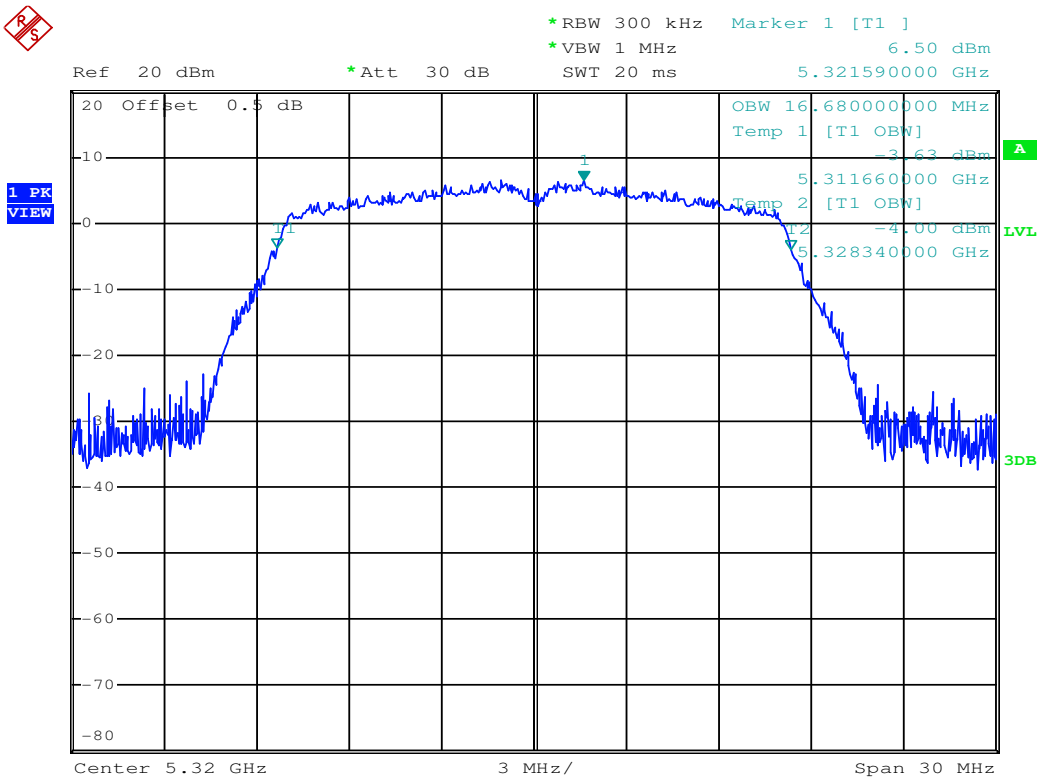

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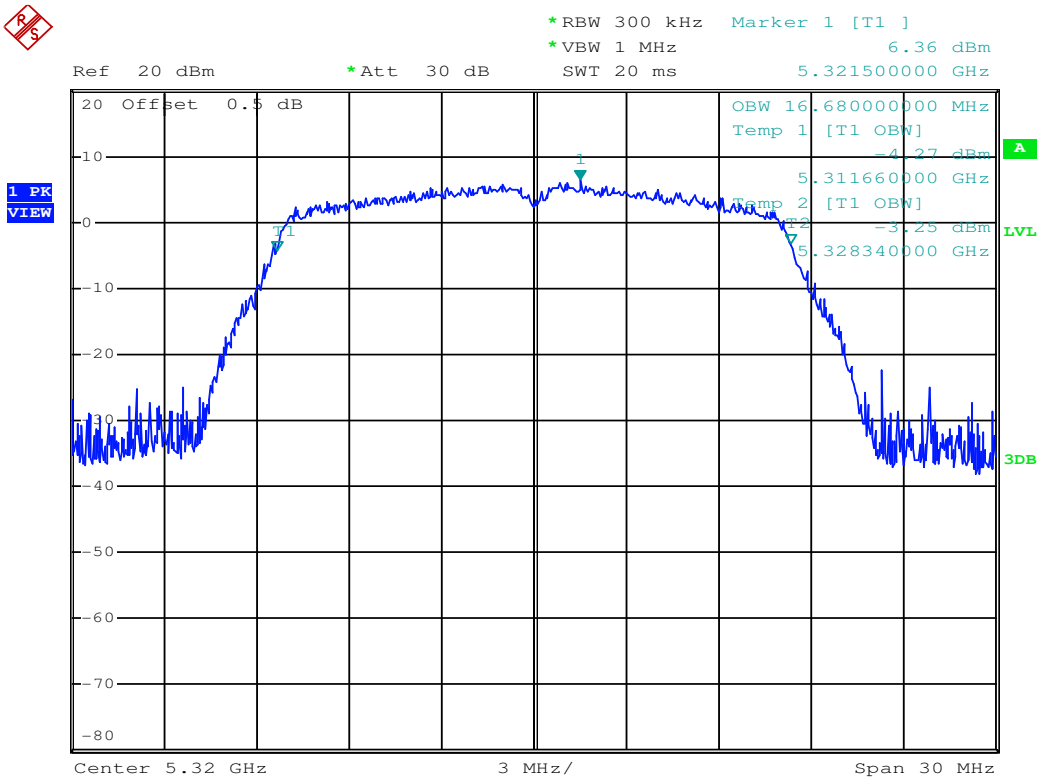

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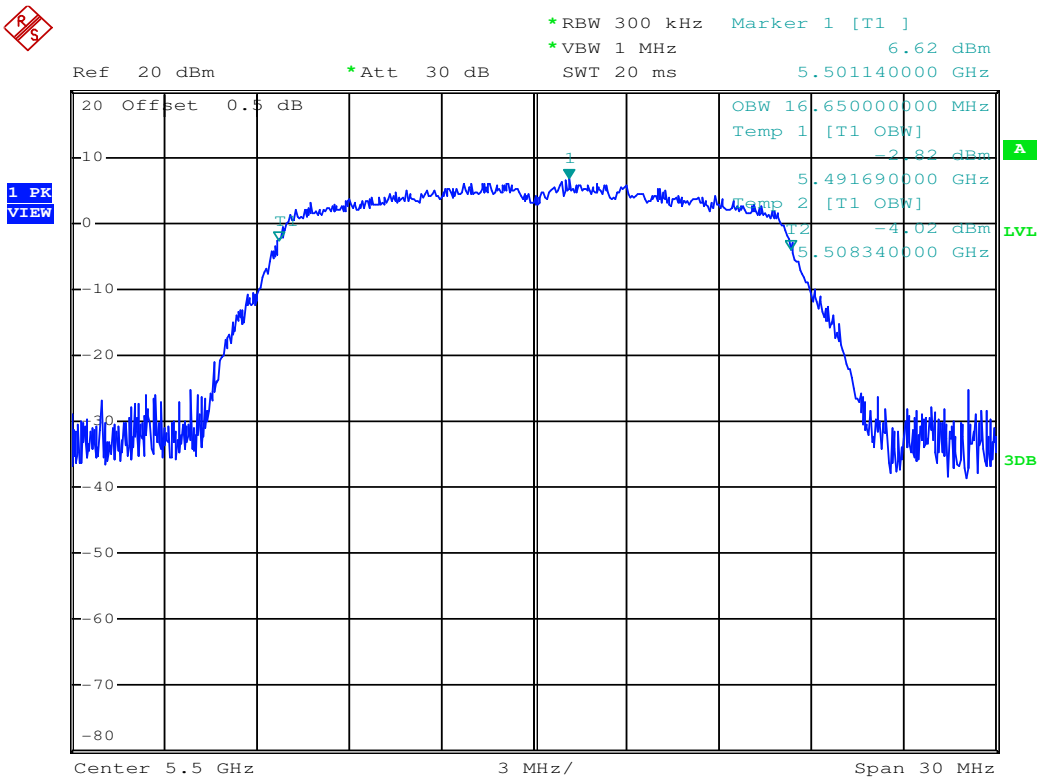

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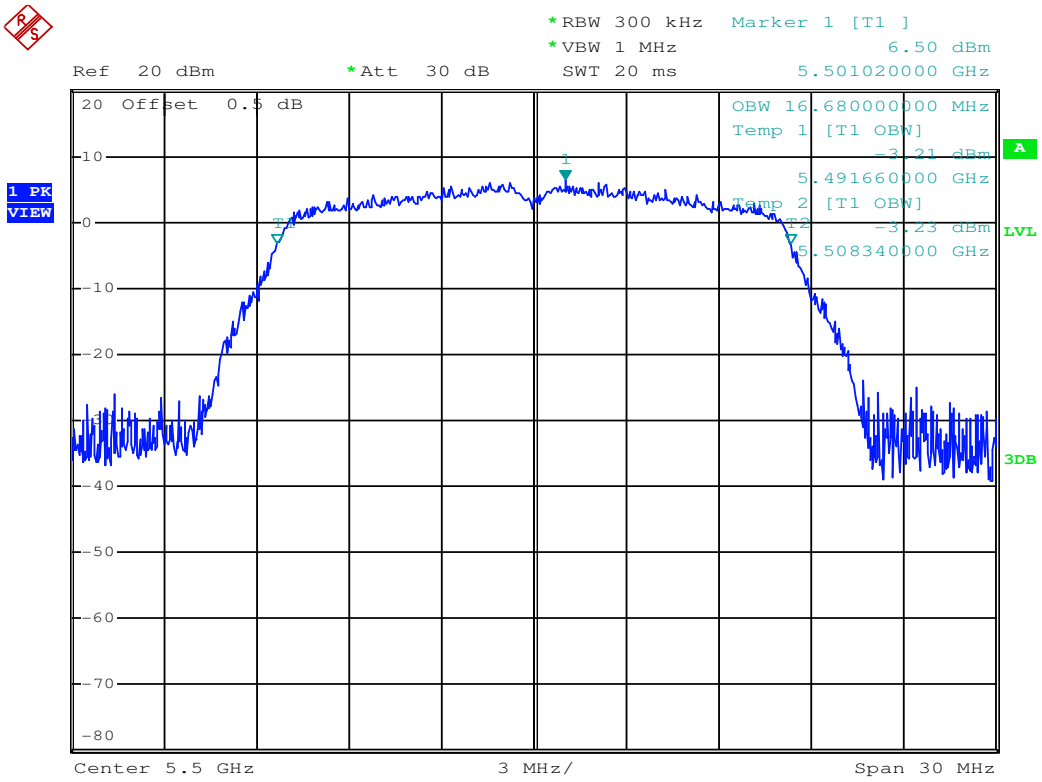

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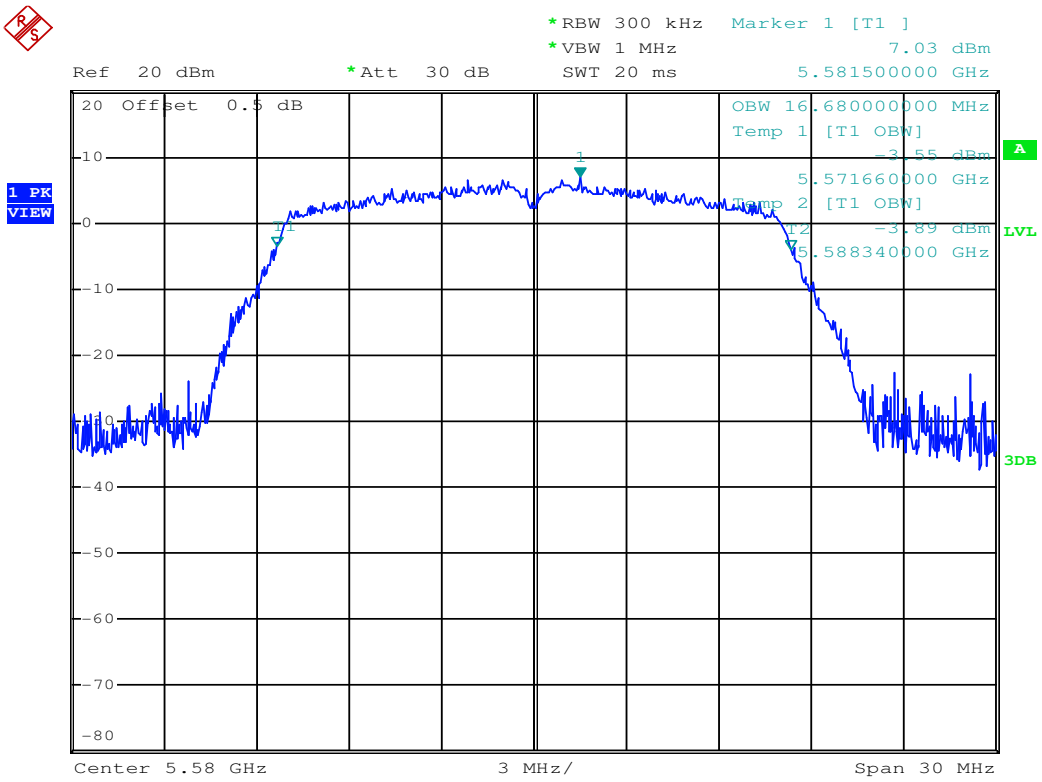
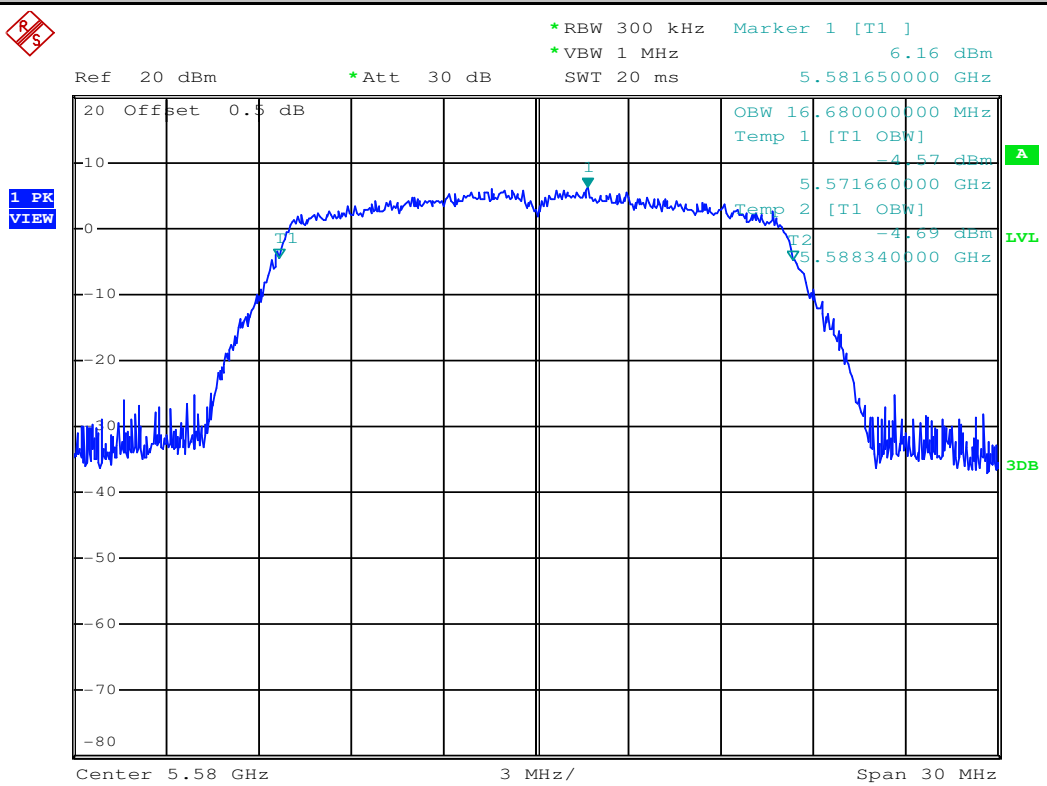
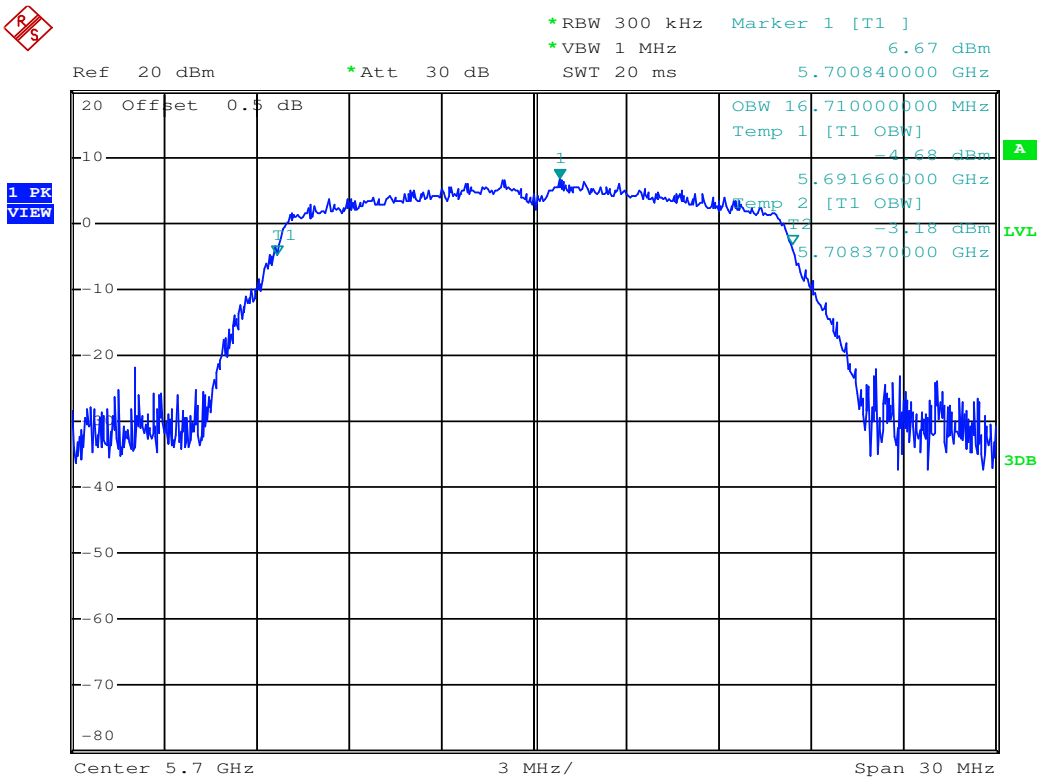


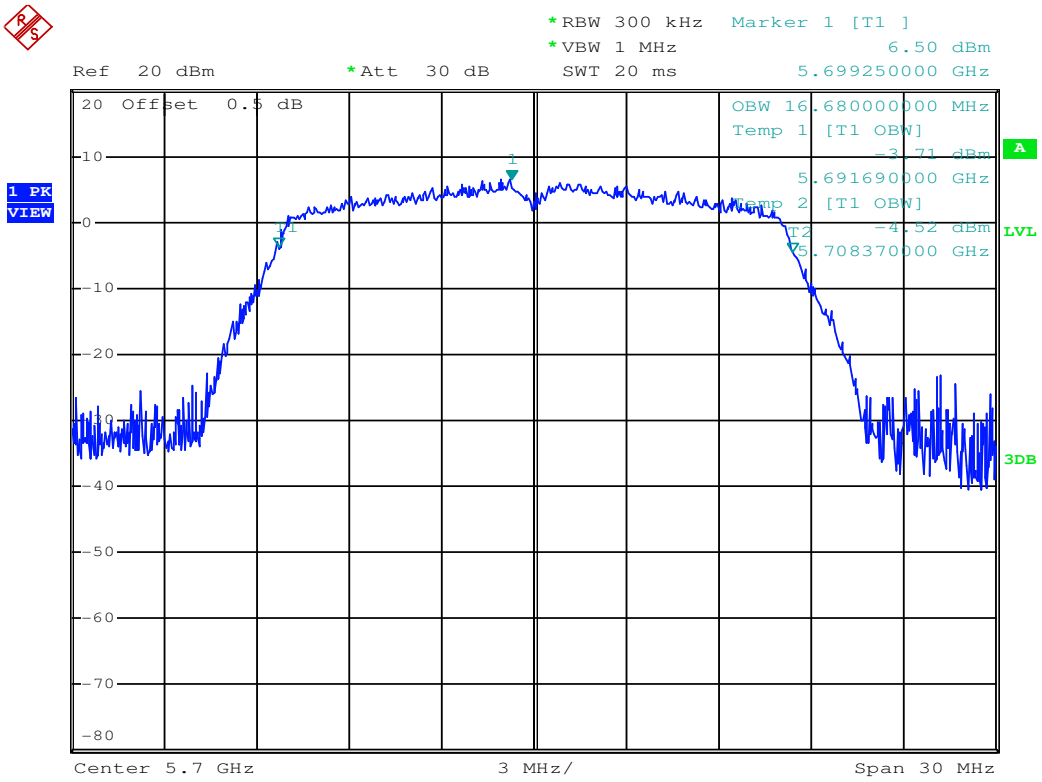
Occupied Bandwidth Measurement_11A_5580_Ant2



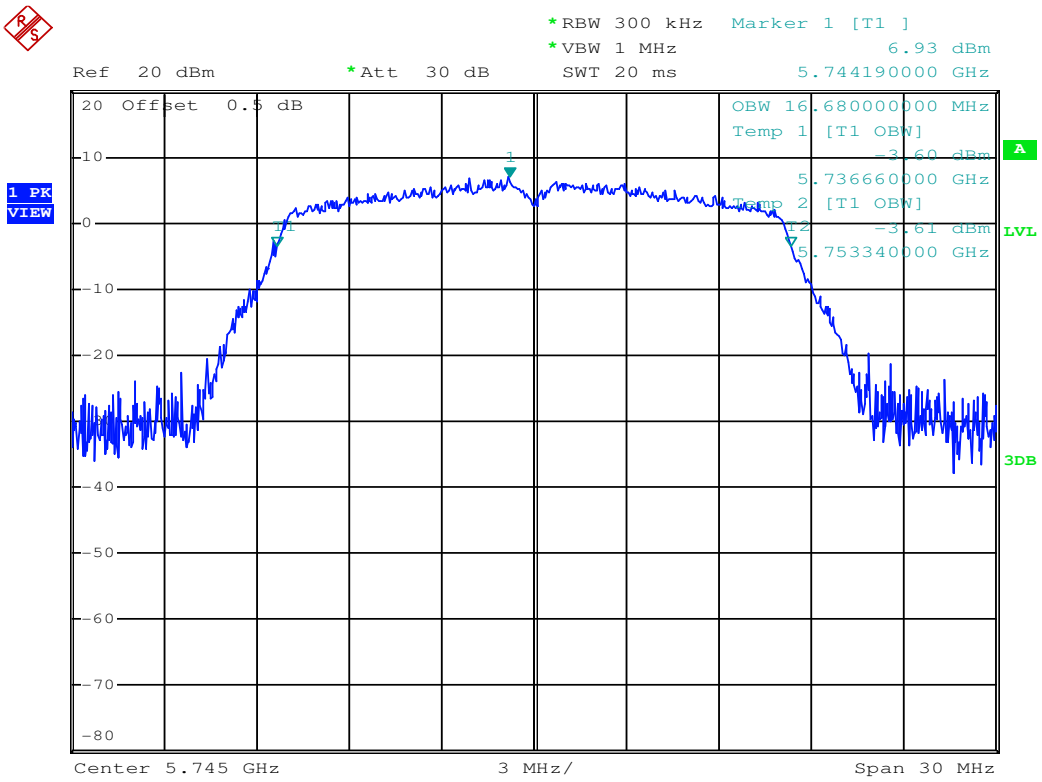
Occupied Bandwidth Measurement_11A_5700_Ant1



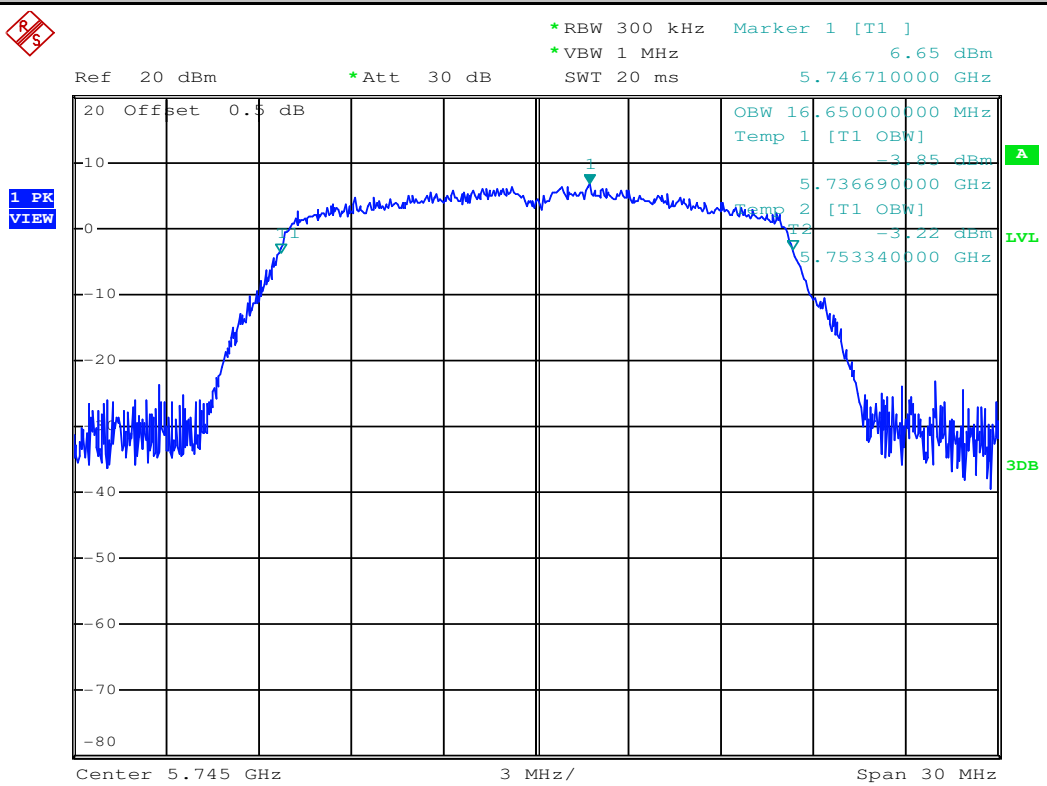
Occupied Bandwidth Measurement_11A_5700_Ant2



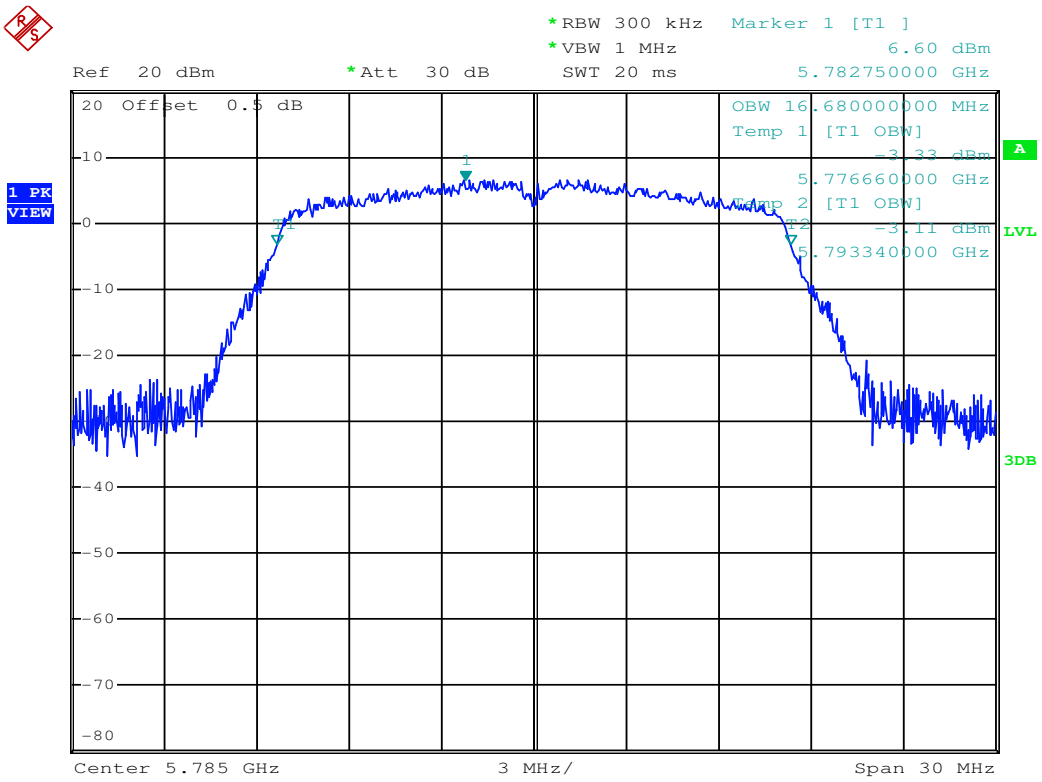
Occupied Bandwidth Measurement_11A_5745_Ant1



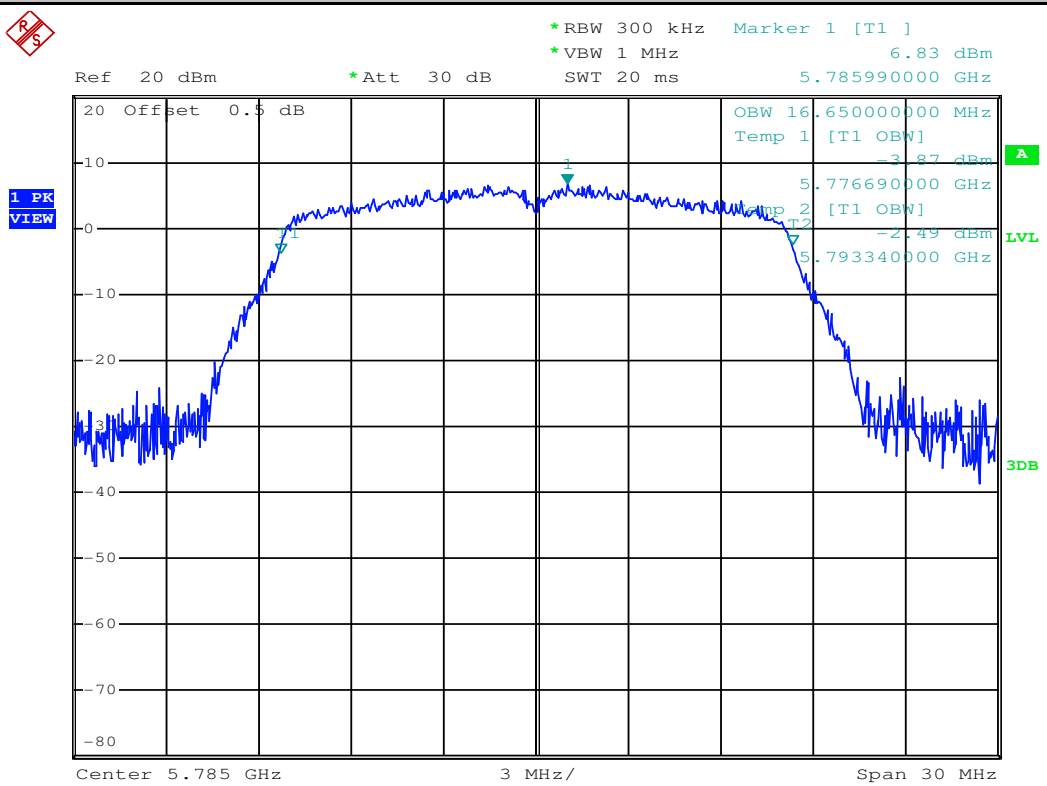
Occupied Bandwidth Measurement_11A_5745_Ant2



Occupied Bandwidth Measurement_11A_5785_Ant1



Occupied Bandwidth Measurement_11A_5785_Ant2



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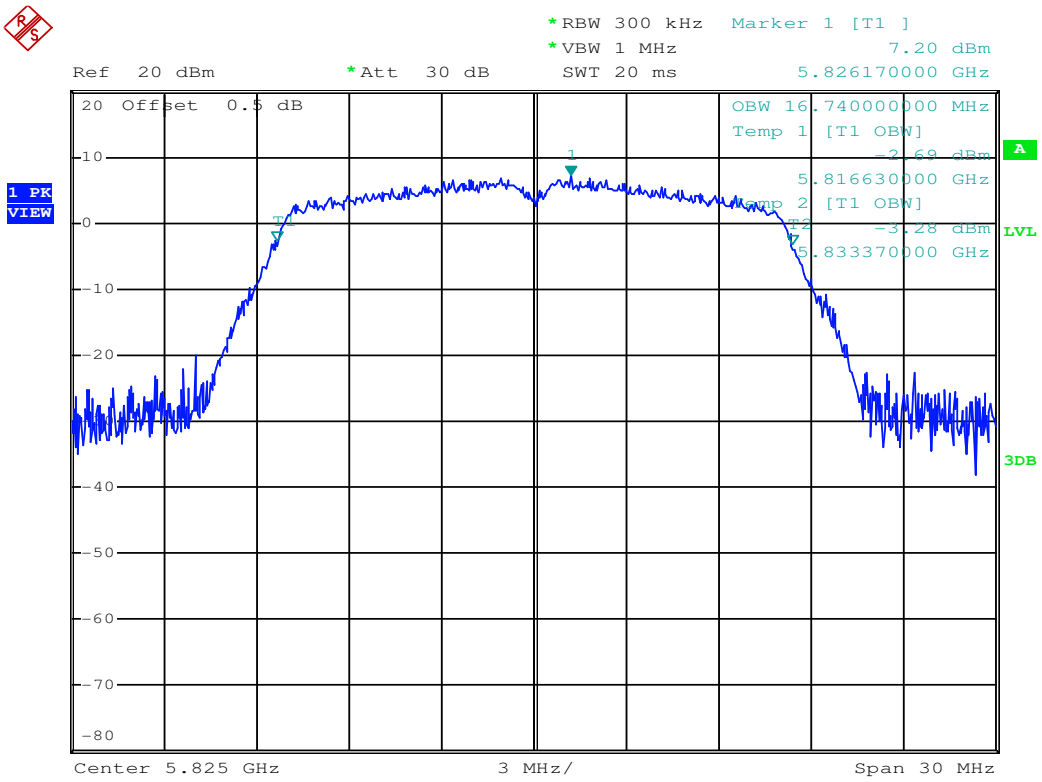
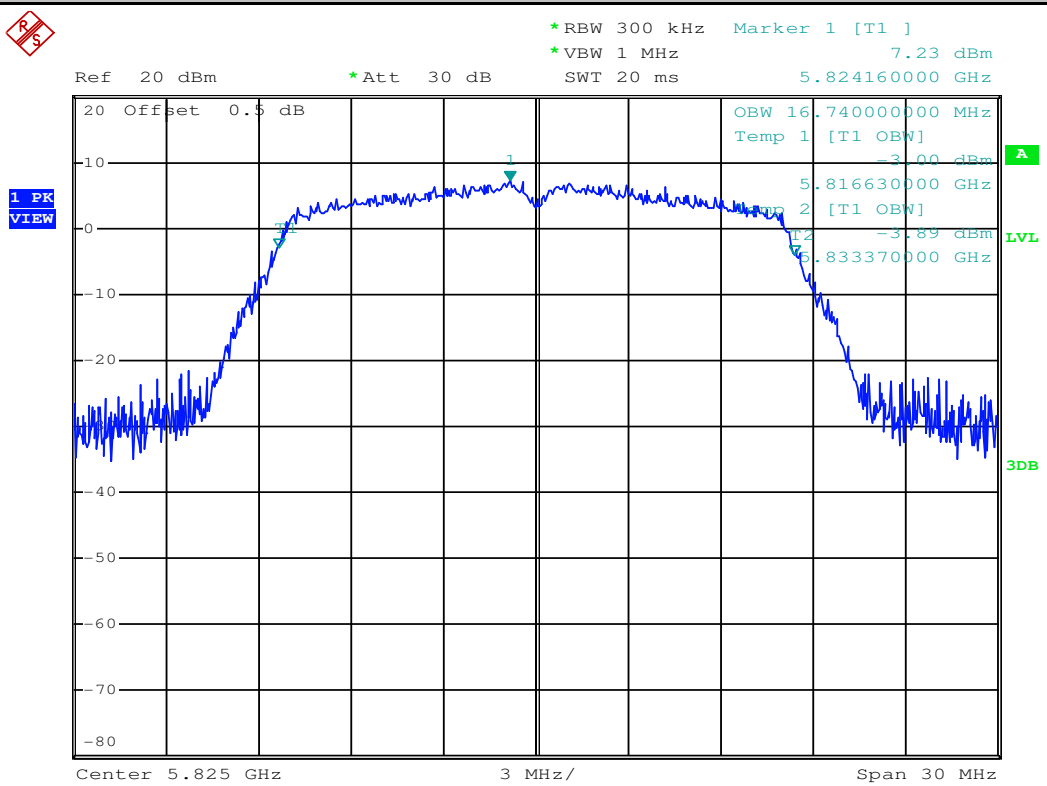
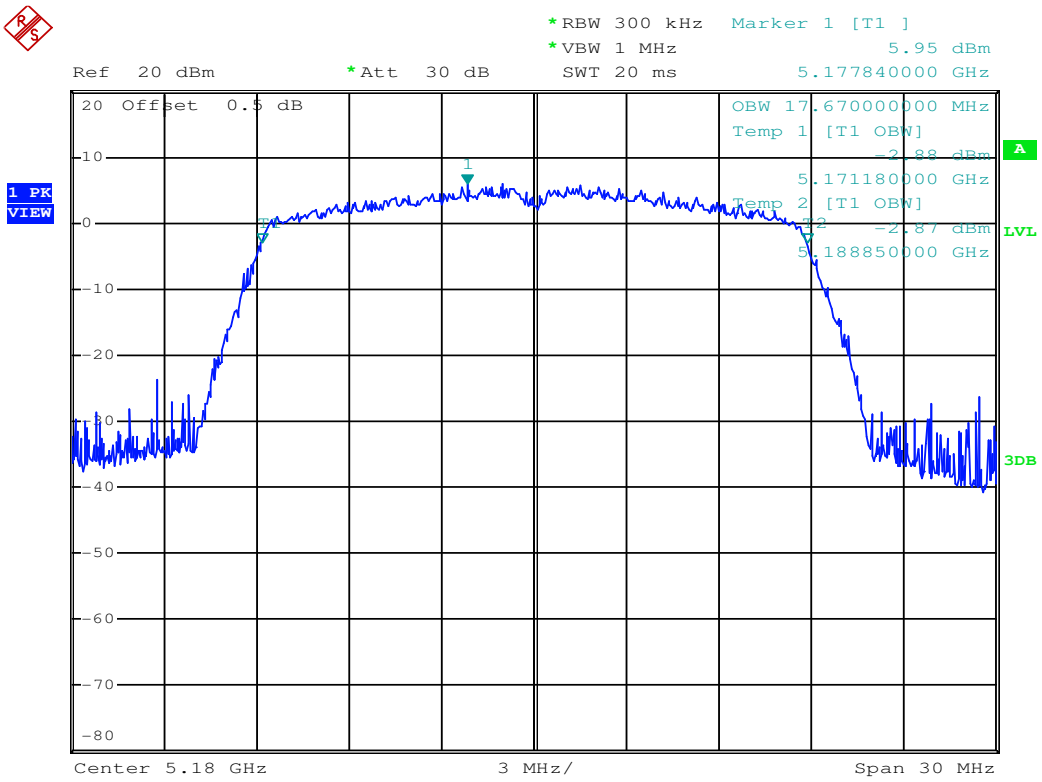


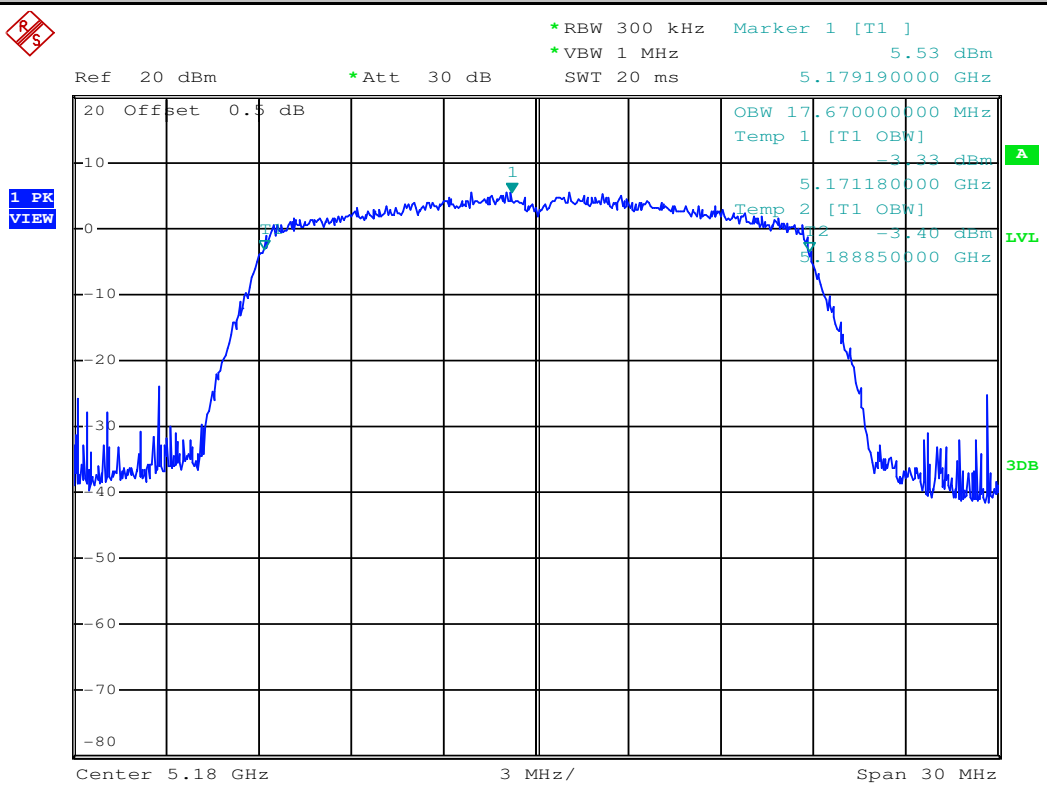
Occupied Bandwidth Measurement_11A_5825_Ant2



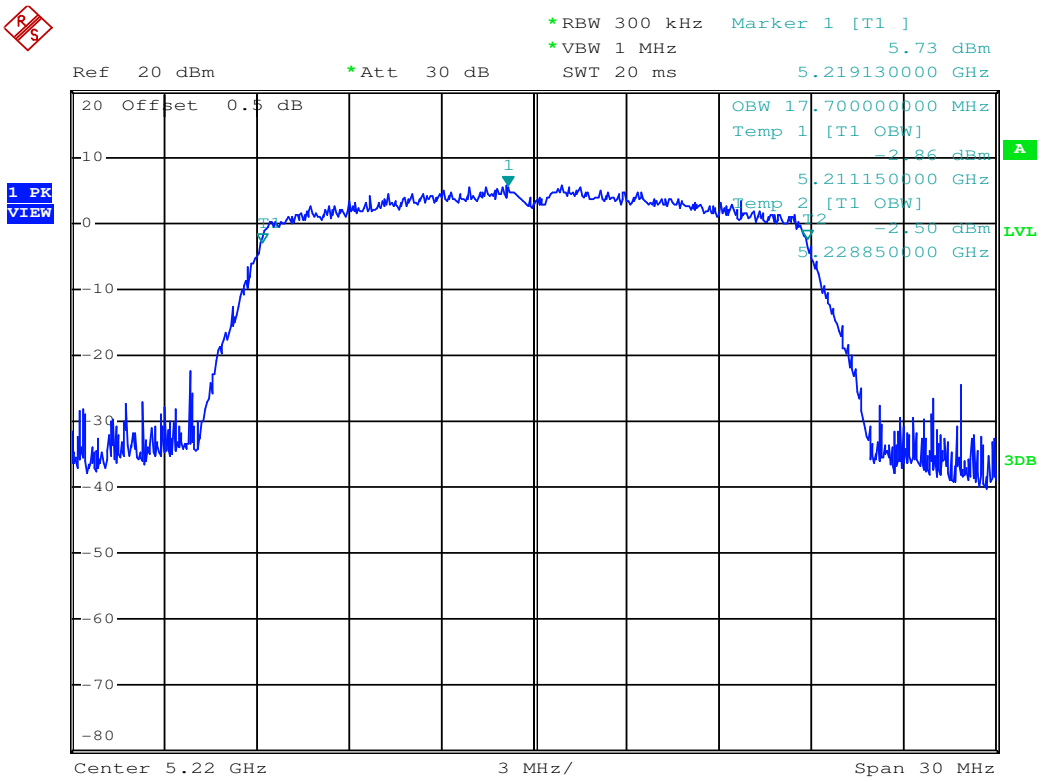
Occupied Bandwidth Measurement_11N20_5180_Ant1



Occupied Bandwidth Measurement_11N20_5180_Ant2



Occupied Bandwidth Measurement_11N20_5220_Ant1



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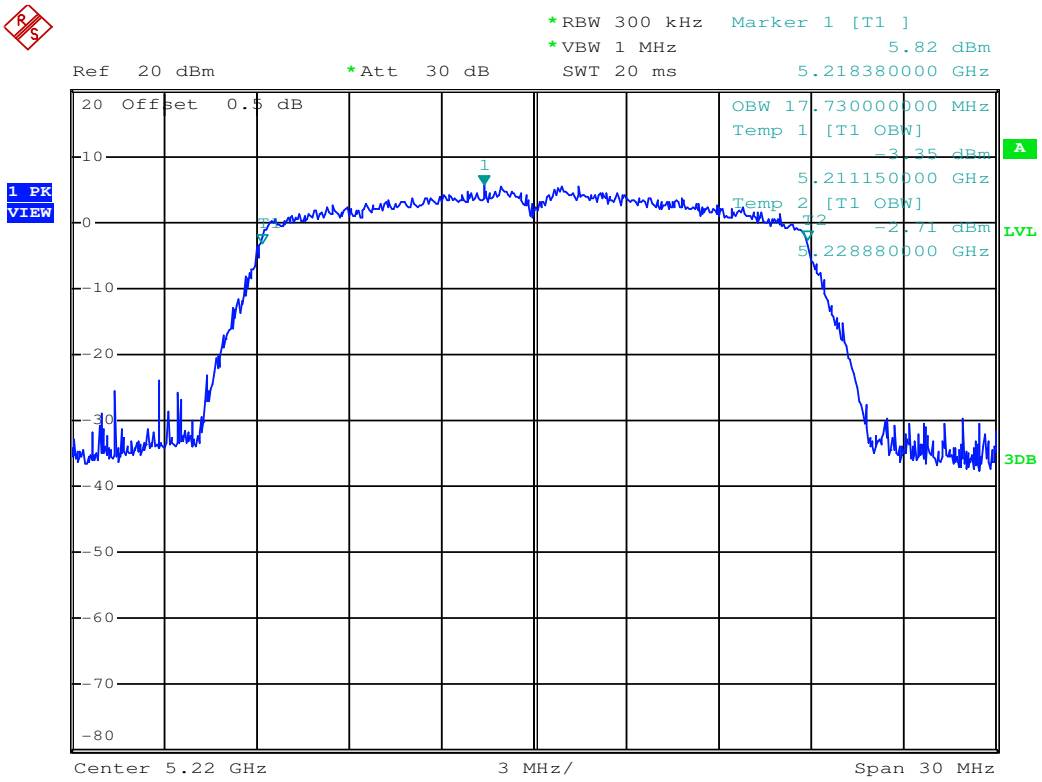
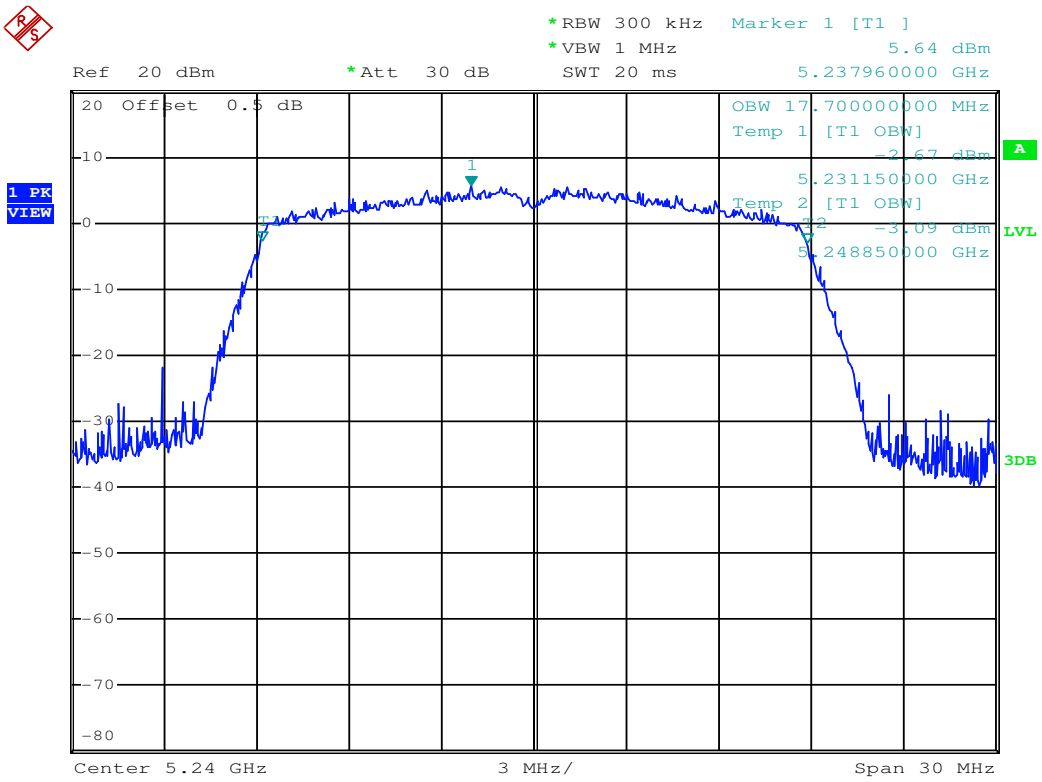


Occupied Bandwidth Measurement_11N20_5240_Ant1



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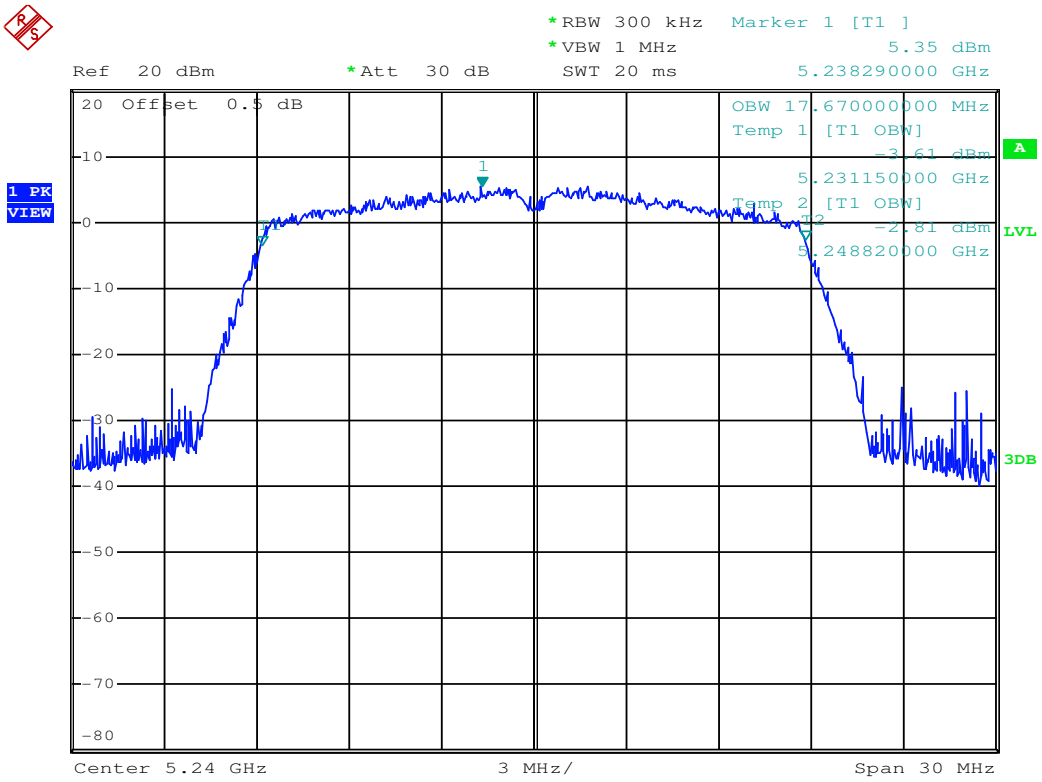
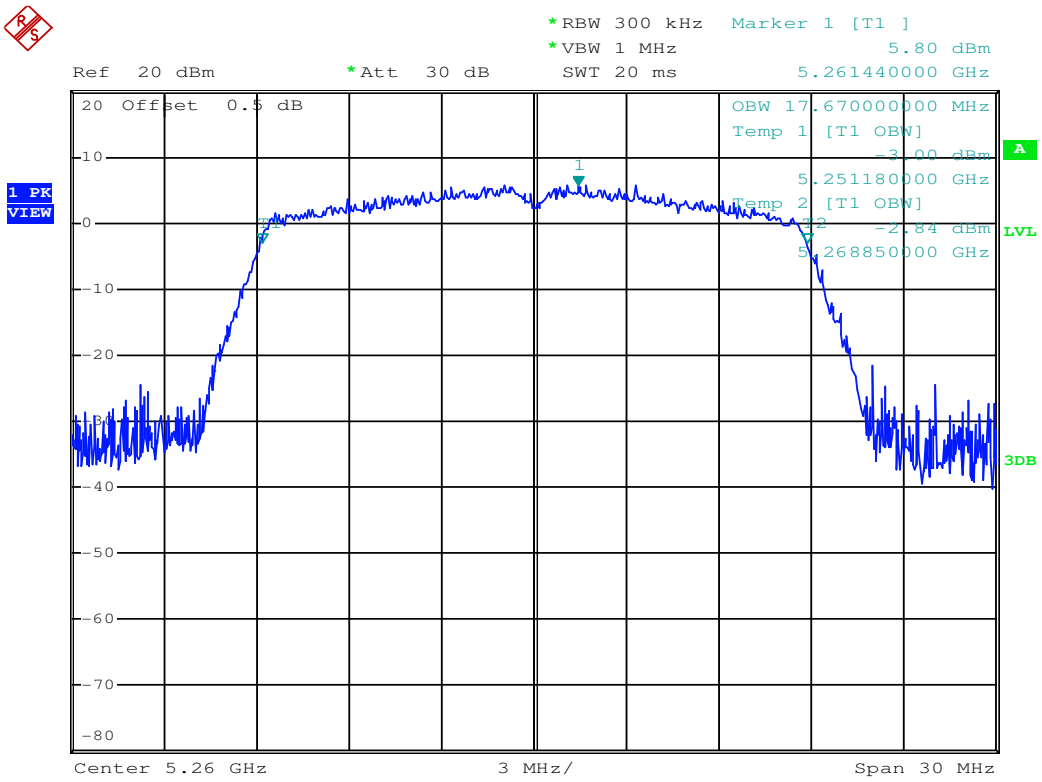


Occupied Bandwidth Measurement_11N20_5260_Ant1



Occupied Bandwidth Measurement_11N20_5260_Ant2