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Report No.: SZEM170200069905
Page: 1 of 440

TEST REPORT

Application No.: SZEM1702000699CR
Applicant: Creative Labs Pte. Ltd.
Address of Applicant: 31 International Business Park #03-01 CREATIVE RESOURCE SINGAPORE 609921
Manufacturer: Creative Labs Pte. Ltd.
Address of Manufacturer: 31 International Business Park #03-01 CREATIVE RESOURCE SINGAPORE 609921
Equipment Under Test (EUT):
EUT Name: Creative X-Fi Sonic Carrier
Model No.: MF8235
Trade mark: CREATIVE
FCC ID: IBAMF8235
Standards: 47 CFR Part 15, Subpart E (2016)
Date of Receipt: 2017-02-07
Date of Test: 2017-02-16 to 2017-02-22
Date of Issue: 2017-03-28

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



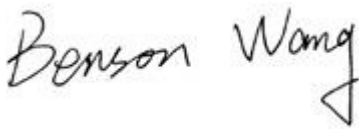
Jack Zhang
EMC Laboratory Manager

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.

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2017-03-29		Original

Authorized for issue by:			
Tested By			
		Benson Wang /Project Engineer	2017-03-22 Date
Checked By			
		Eric Fu /Reviewer	2017-03-28 Date



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 E 15.203	Pass

Radio Spectrum Matter Part				
Item	Standard	Method	Requirement	Result
Conducted Disturbance 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 E 15.207 & 15.407 b(6)	Pass
26 dB Emission Bandwidth & 99% Occupied Bandwidth	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II C 1	47 CFR Part 15, Subpart E 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 E 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 E 15.407 (a)	Pass
Equivalent Isotropic Radiated Power (e.i.r.p.)	47 CFR Part 15 Section 15.407	KDB 789033 D02 II E	47 CFR Part 15, Subpart E 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 E 15.407 (a)	Pass
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart E 15.209 & 15.407(b)	Pass
Radiated Spurious Emissions	47 CFR Part 15, Subpart E 15.407	KDB 789033 D02 II G	47 CFR Part 15, Subpart E 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 E 15.407 (g)	Pass



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4 General Information

4.1 Details of E.U.T.

Power supply:	AC 120V/60Hz			
Cable:	AC cable for MF8235: 162cm unshielded with one ferrite core CDW-B18821A-00 & LS9-AC11DBT-AC11DBT:			
Operation Frequency:	Band	Mode	Frequency Range(MHz)	Number of channels
	UNII Band I	IEEE 802.11a	5180-5240	4
		IEEE 802.11n/ac 20MHz	5180-5240	4
		IEEE 802.11n/ac 40MHz	5190-5230	2
		IEEE 802.11ac 80MHz	5210	1
	UNII Band III	IEEE 802.11a	5745-5825	5
		IEEE 802.11n/ac 20MHz	5745-5825	5
		IEEE 802.11n/ac 40MHz	5755-5795	2
IEEE 802.11ac 80MHz		5775	1	
* The 5600-5650MHz can not be used.				
Type of Modulation:	IEEE 802.11a: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE 802.11n: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE 802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)			
Antenna type:	PIFA			
Antenna gain:	4dBi			

4.2 Description of Support Units

The EUT has been tested as an independent unit.



4.3 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	7.25 x 10 ⁻⁸
2	Timeout	2s
3	Duty cycle	0.37%
4	Occupied Bandwidth	3%
5	RF conducted power	0.75dB
6	RF power density	2.84dB
7	Conducted Spurious emissions	0.75dB
8	RF Radiated power	4.5dB (below 1GHz)
		4.8dB (above 1GHz)
9	Radiated Spurious emission test	4.5dB (30MHz-1GHz)
		4.8dB (1GHz-18GHz)
10	Temperature test	1 °C
11	Humidity test	3%
12	Supply voltages	1.5%
13	Time	3%



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 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

- **FCC – Registration No.: 556682**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

- **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 Disturbance 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	2016-05-13	2017-05-13
LISN	Rohde & Schwarz	ENV216	SEM007-01	2016-10-09	2017-10-09
LISN	ETS-LINDGREN	3816/2	SEM007-02	2016-04-25	2017-04-25
8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T8-02	EMC0120	2016-09-28	2017-09-28
4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T4-02	EMC0121	2016-09-28	2017-09-28
2 Line ISN	Fischer Custom	FCC-TLISN-T2-02	EMC0122	2016-09-28	2017-09-28

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2016-05-13	2017-05-13
EXA Spectrum Analyzer	Agilent Technologies Inc	N9010A	SEM004-09	2016-07-19	2017-07-19
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-02	2014-11-15	2017-11-15
Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2016-10-09	2017-10-09
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2015-06-14	2018-06-14
Horn Antenna (18-26GHz)	ETS-Lindgren	3160	SEM003-12	2014-11-24	2017-11-24
Horn Antenna(26GHz-40GHz)	A.H.Systems, inc.	SAS-573	SEM003-13	2015-02-12	2018-02-12
Low Noise Amplifier	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2016-10-09	2017-10-09
Band filter	Amindeon	Asi 3314	SEM023-01	N/A	N/A



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Shenzhen Branch

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RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
10m Semi-Anechoic Chamber	SAEMC	FSAC1018	SEM001-03	2016-05-13	2017-05-13
EMI Test Receiver (9k-7GHz)	Rohde & Schwarz	ESR	SEM004-03	2016-04-25	2017-04-25
Trilog-Broadband Antenna(30M-1GHz)	Schwarzbeck	VULB9168	SEM003-18	2016-06-29	2019-06-29
Pre-amplifier	Sonoma Instrument Co	310N	SEM005-03	2016-07-06	2017-07-06
Loop Antenna	ETS-Lindgren	6502	SEM003-08	2015-08-14	2018-08-14

RF Conducted					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2016-10-09	2017-10-09
Spectrum Analyzer	Rohde & Schwarz	FSP	SEM004-06	2016-10-09	2017-10-09
Signal Generator	Rohde & Schwarz	SML03	SEM006-02	2016-04-25	2017-04-25
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2016-10-09	2017-10-09

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2016-10-12	2017-10-12
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2016-10-12	2017-10-12
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2016-10-12	2017-10-12
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2016-05-18	2017-05-18

6 Radio Spectrum Technical Requirement

6.1 Antenna Requirement

6.1.1 Test Requirement:

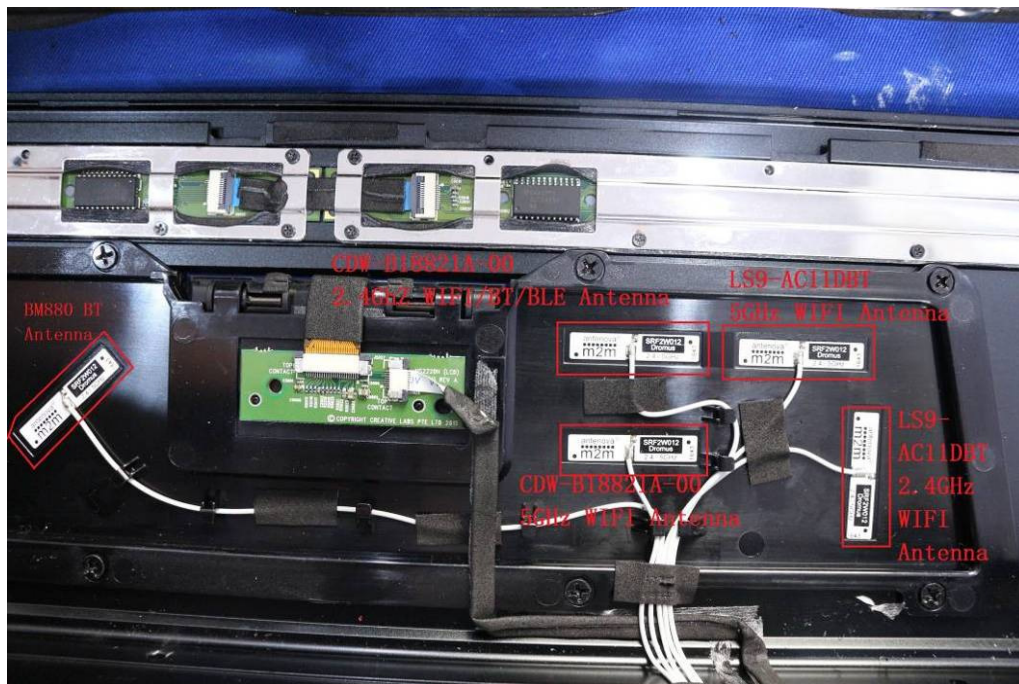
47 CFR Part 15C Section 15.203

6.1.2 Conclusion

15.203 requirement:

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

EUT Antenna: (LS9-AC11DBT,CDW-B18821A-00)



The antenna uses a unique coupling to the intentional radiator and no consideration of replacement. The best case gain of the antenna is 4dBi.



7 Radio Spectrum Matter Test Results

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

Test Requirement 47 CFR Part 15, Subpart E 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: 25.0 °C Humidity: 55 % RH Atmospheric Pressure: 1020 mbar

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

Transmitting with all kind of modulations, data rates at lowest, middle and highest channel.

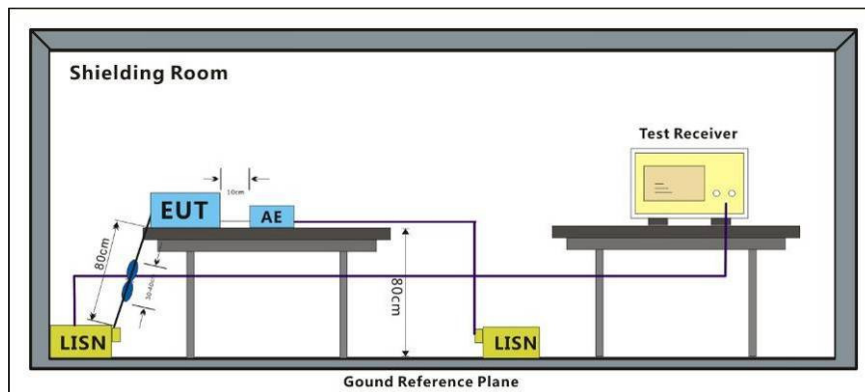
c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

Through Pre-scan, find the 6Mbps of rate of 802.11a at lowest channel is the worst case.

Only the worst case is recorded in the report.

7.1.2 Test Setup Diagram

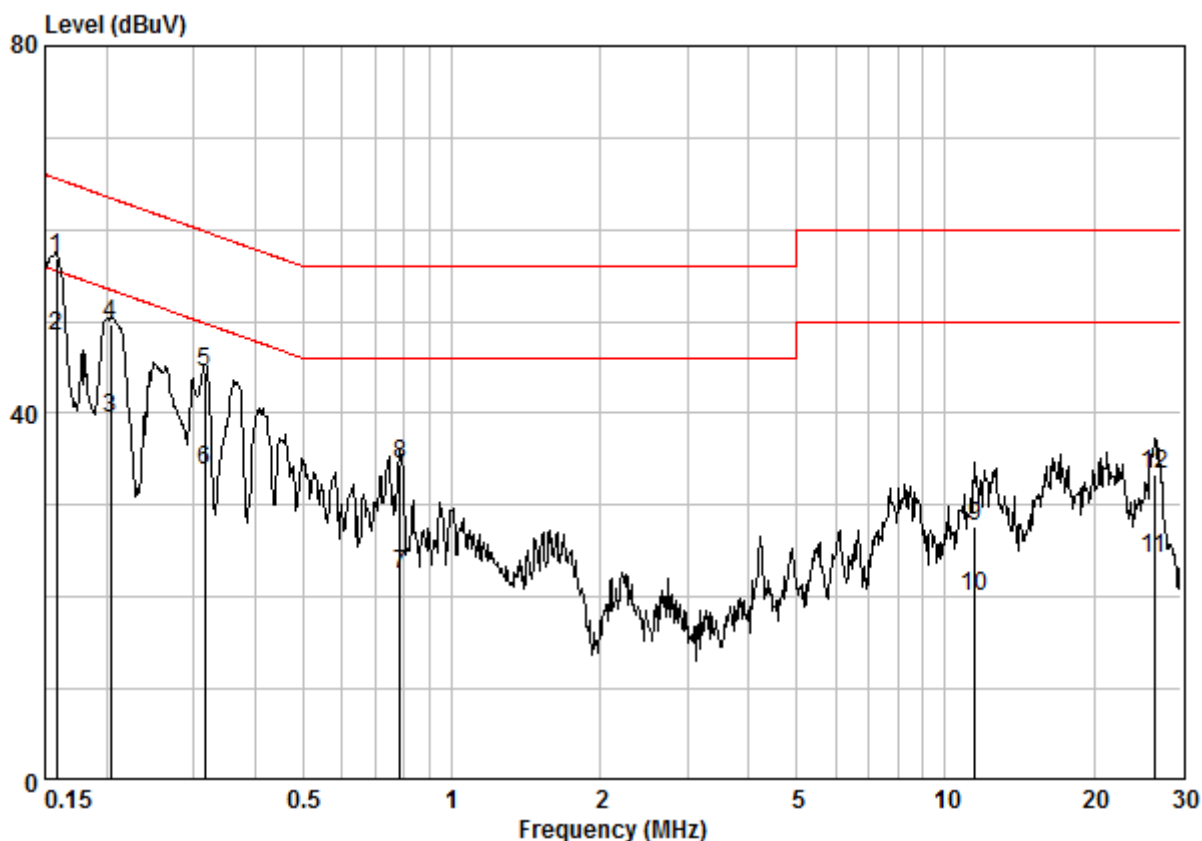




7.1.3 Measurement Data

- 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.

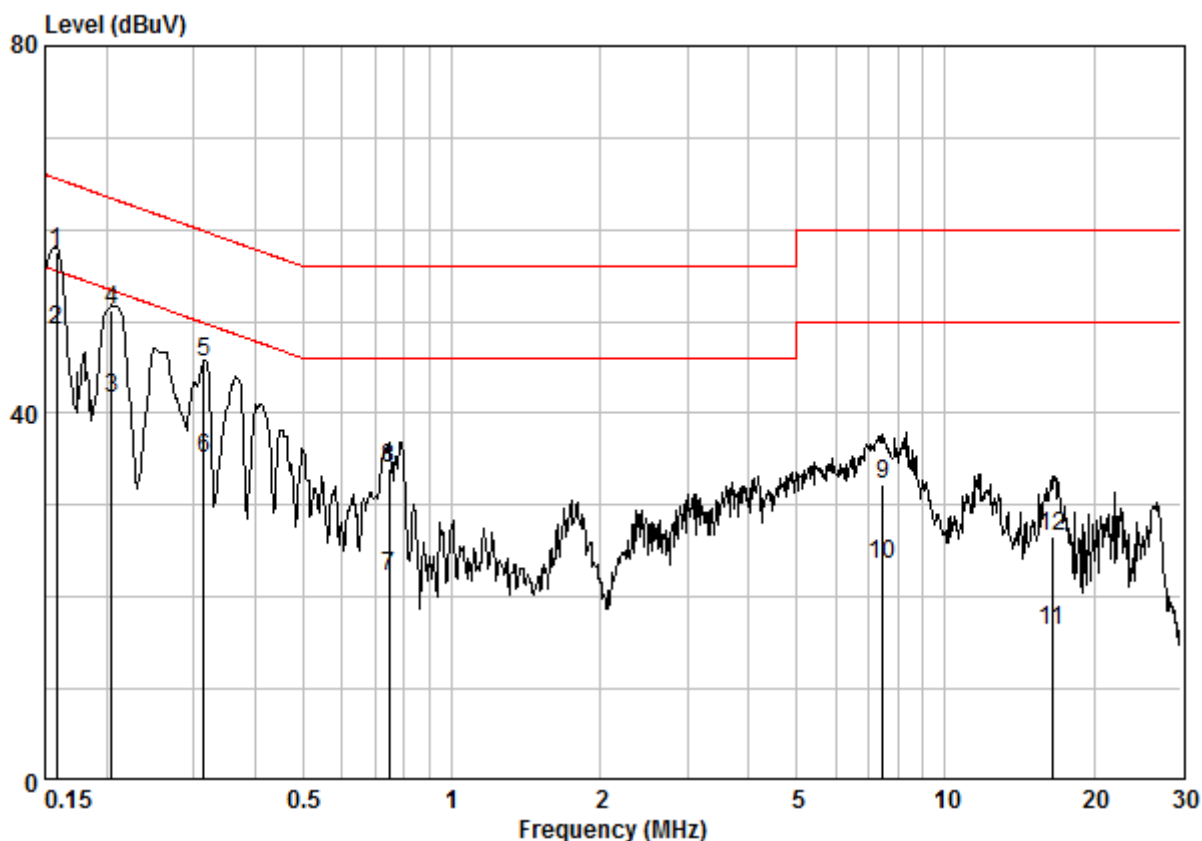
Mode:c; Line:Live Line



Site : Shielding Room
Condition : CE LINE
Job No. : 00699CR
Test Mode : c

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15816	0.02	9.64	47.26	56.92	65.56	-8.64	QP
2	0.15816	0.02	9.64	38.79	48.45	55.56	-7.11	AVERAGE
3	0.20396	0.02	9.64	29.75	39.41	53.45	-14.04	AVERAGE
4	0.20396	0.02	9.64	40.12	49.78	63.45	-13.66	QP
5	0.31662	0.02	9.64	34.86	44.52	59.80	-15.28	QP
6	0.31662	0.02	9.64	24.23	33.89	49.80	-15.91	AVERAGE
7	0.78761	0.03	9.65	12.73	22.41	46.00	-23.59	AVERAGE
8	0.78761	0.03	9.65	24.77	34.45	56.00	-21.55	QP
9	11.498	0.15	9.89	17.65	27.68	60.00	-32.32	QP
10	11.498	0.15	9.89	10.13	20.16	50.00	-29.84	AVERAGE
11	26.558	0.16	10.38	13.63	24.17	50.00	-25.83	AVERAGE
12	26.558	0.16	10.38	22.85	33.38	60.00	-26.62	QP

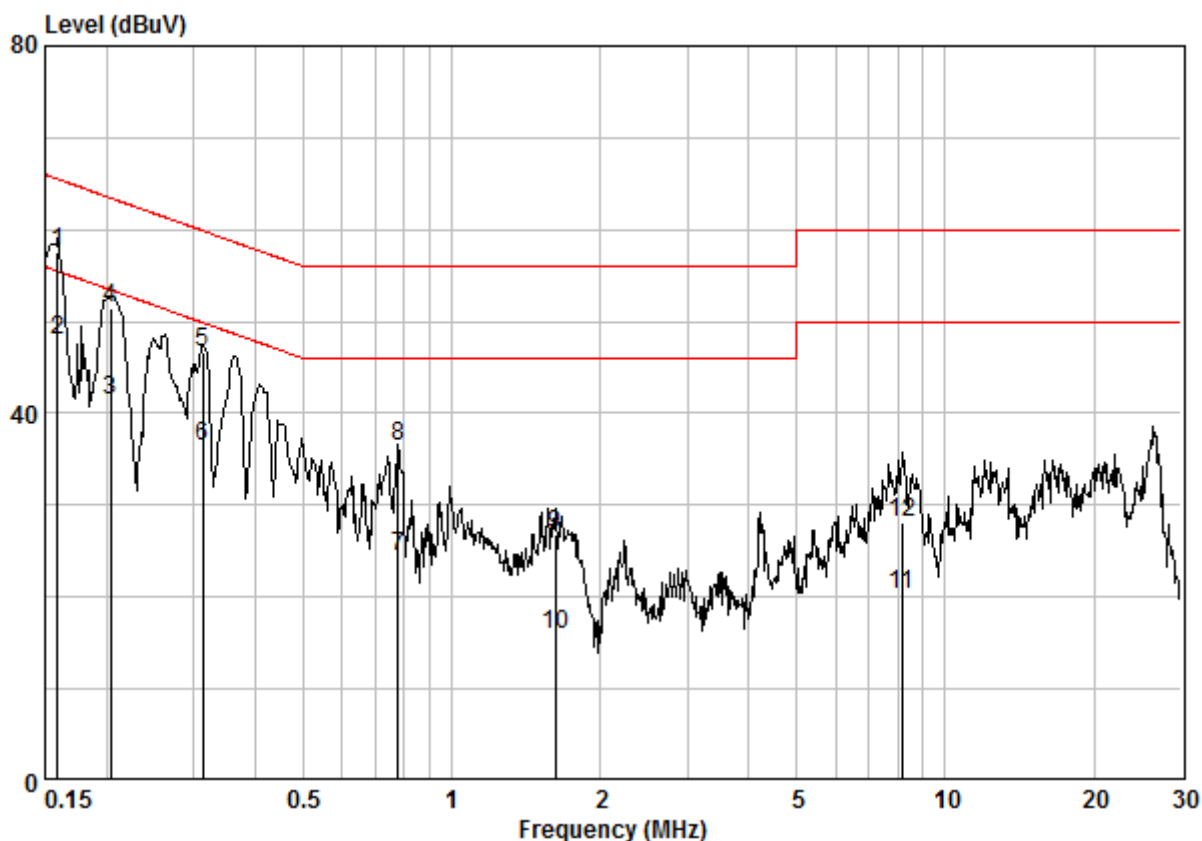
Mode:c; Line:Neutral Line



Site : Shielding Room
Condition : CE NEUTRAL
Job No. : 00699CR
Test Mode : c

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15816	0.02	9.64	47.98	57.63	65.56	-7.93	QP
2	0.15816	0.02	9.64	39.40	49.05	55.56	-6.51	AVERAGE
3	0.20505	0.02	9.63	31.96	41.61	53.40	-11.79	AVERAGE
4	0.20505	0.02	9.63	41.62	51.27	63.40	-12.13	QP
5	0.31495	0.02	9.63	35.87	45.52	59.84	-14.32	QP
6	0.31495	0.02	9.63	25.52	35.17	49.84	-14.67	AVERAGE
7	0.74697	0.03	9.64	12.53	22.19	46.00	-23.81	AVERAGE
8	0.74697	0.03	9.64	24.37	34.04	56.00	-21.96	QP
9	7.486	0.09	9.78	22.42	32.30	60.00	-27.70	QP
10	7.486	0.09	9.78	13.60	23.47	50.00	-26.53	AVERAGE
11	16.486	0.16	10.04	6.19	16.39	50.00	-33.61	AVERAGE
12	16.486	0.16	10.04	16.37	26.57	60.00	-33.43	QP

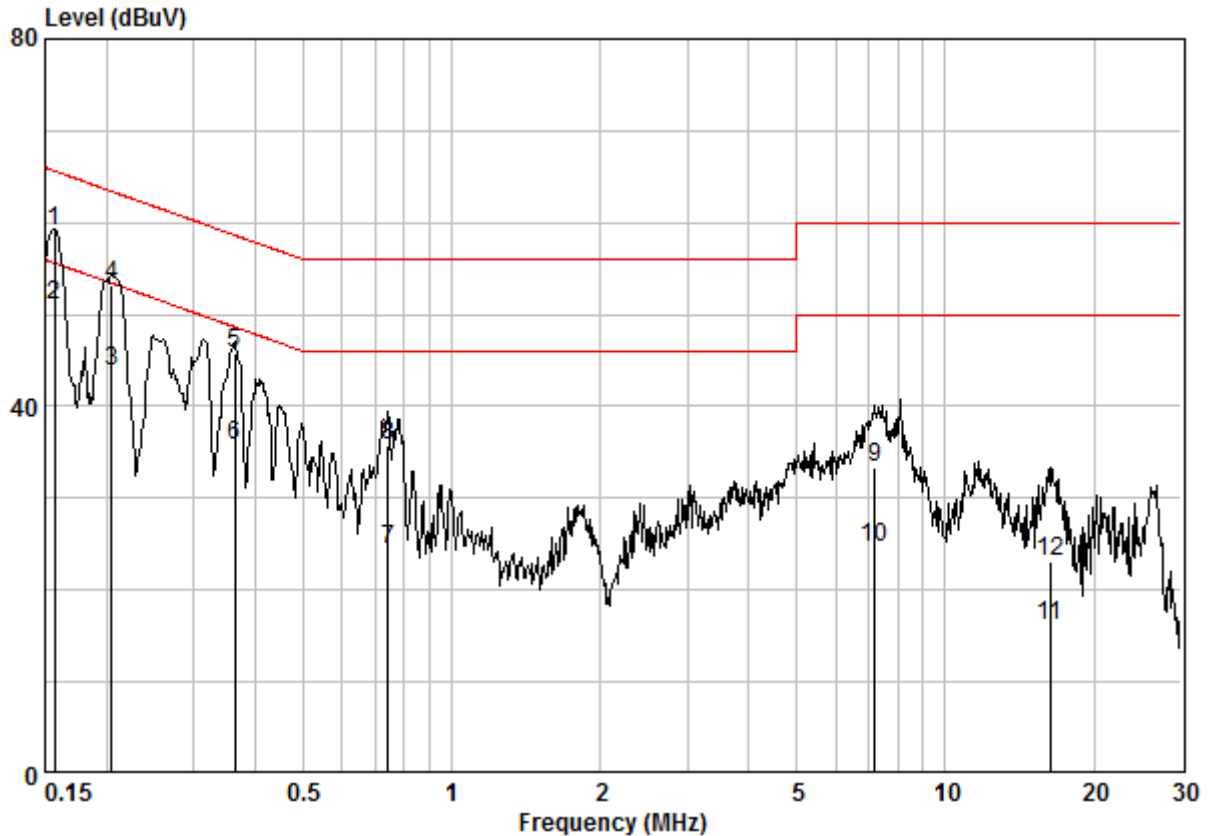
Mode:f; Line:Live Line



Site : Shielding Room
Condition : CE LINE
Job No. : 00699CR
Test Mode : f

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15900	0.02	9.64	47.84	57.50	65.52	-8.02	QP
2	0.15900	0.02	9.64	38.23	47.89	55.52	-7.63	AVERAGE
3	0.20396	0.02	9.64	31.69	41.35	53.45	-12.10	AVERAGE
4	0.20396	0.02	9.64	41.84	51.50	63.45	-11.95	QP
5	0.31328	0.02	9.64	36.95	46.61	59.88	-13.27	QP
6	0.31328	0.02	9.64	26.64	36.30	49.88	-13.58	AVERAGE
7	0.77931	0.03	9.65	14.73	24.40	46.00	-21.60	AVERAGE
8	0.77931	0.03	9.65	26.62	36.30	56.00	-19.70	QP
9	1.619	0.03	9.66	17.17	26.86	56.00	-29.14	QP
10	1.619	0.03	9.66	6.13	15.82	46.00	-30.18	AVERAGE
11	8.148	0.10	9.81	10.44	20.36	50.00	-29.64	AVERAGE
12	8.148	0.10	9.81	18.11	28.03	60.00	-31.97	QP

Mode:f; Line:Neutral Line



Site : Shielding Room
Condition : CE NEUTRAL
Job No. : 00699CR
Test Mode : f

	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.15649	0.02	9.64	49.52	59.17	65.65	-6.48	QP
2	0.15649	0.02	9.64	41.45	51.11	55.65	-4.54	AVERAGE
3	0.20505	0.02	9.63	34.27	43.92	53.40	-9.48	AVERAGE
4	0.20505	0.02	9.63	43.59	53.24	63.40	-10.17	QP
5	0.36338	0.02	9.63	36.12	45.77	58.65	-12.88	QP
6	0.36338	0.02	9.63	26.21	35.86	48.65	-12.79	AVERAGE
7	0.74302	0.03	9.64	14.68	24.35	46.00	-21.65	AVERAGE
8	0.74302	0.03	9.64	26.19	35.86	56.00	-20.14	QP
9	7.213	0.08	9.77	23.50	33.36	60.00	-26.64	QP
10	7.213	0.08	9.77	14.71	24.57	50.00	-25.43	AVERAGE
11	16.312	0.16	10.04	5.83	16.03	50.00	-33.97	AVERAGE
12	16.312	0.16	10.04	12.81	23.00	60.00	-37.00	QP

7.2 26dB Emission bandwidth and 99% Occupied Bandwidth

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

Test Method: KDB 789033 D02 II C 1

Limit: N/A

7.2.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

Pretest these mode to find the worst case:

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

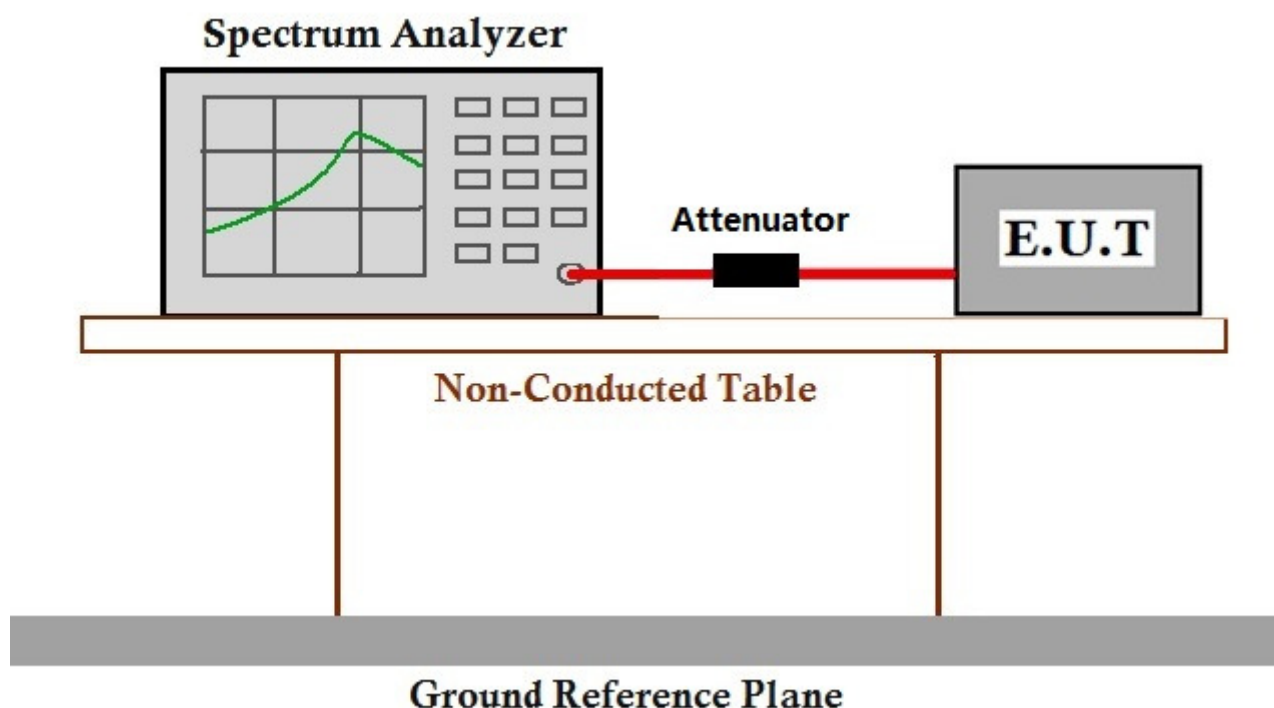
The worst case for final test:

Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a;

MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40); MCS0 of rate is the worst case of 802.11ac(HT20); MCS0 of rate is the worst case of 802.11ac(HT40); MCS0 of rate is the worst case of 802.11ac(HT80)

Only the worst case is recorded in the report.

7.2.2 Test Setup Diagram





7.2.3 Measurement Data

The detailed test data see: Appendix 15.407

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

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

7.3.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

Pretest these mode to find the worst case:
 d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.
 g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

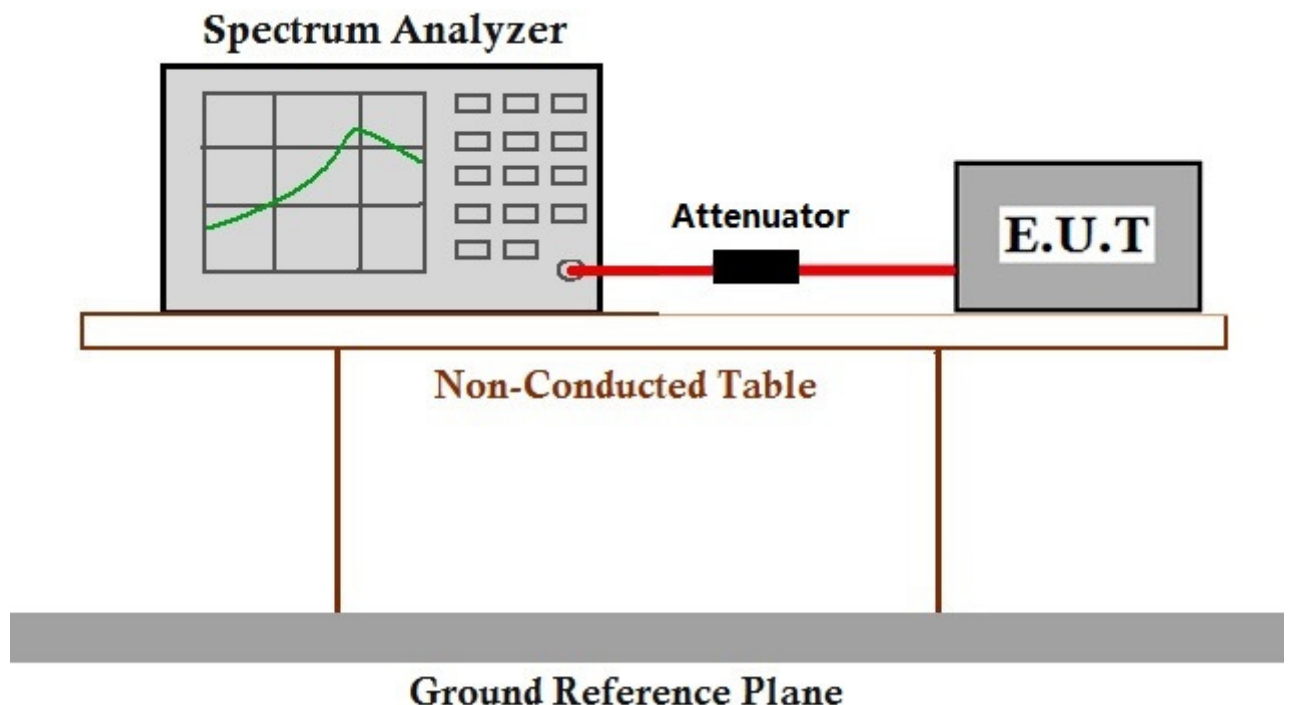
The worst case for final test:
 d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.
 g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a;

MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40); 1SS0 of rate is the worst case of 802.11ac(HT20); 1SS0 of rate is the worst case of 802.11ac(HT40); 1SS0 of rate is the worst case of 802.11ac(HT80)

Only the worst case is recorded in the report.

7.3.2 Test Setup Diagram



7.3.3 Measurement Data

The detailed test data see: Appendix 15.407

7.4 Maximum Conducted output power

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

Test Method: KDB 789033 D02 II E

Limit:

Frequency band(MHz)	Limit
5150-5250	$\leq 1\text{W}(30\text{dBm})$ for master device
	$\leq 250\text{mW}(24\text{dBm})$ for client device
5250-5350	$\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$
5470-5725	$\leq 250\text{mW}(24\text{dBm})$ for client device or $11\text{dBm}+10\log B^*$
5725-5850	$\leq 1\text{W}(30\text{dBm})$
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.	

7.4.1 E.U.T. Operation

Operating Environment:

Temperature: 23.0 °C Humidity: 56 % RH Atmospheric Pressure: 1020 mbar

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

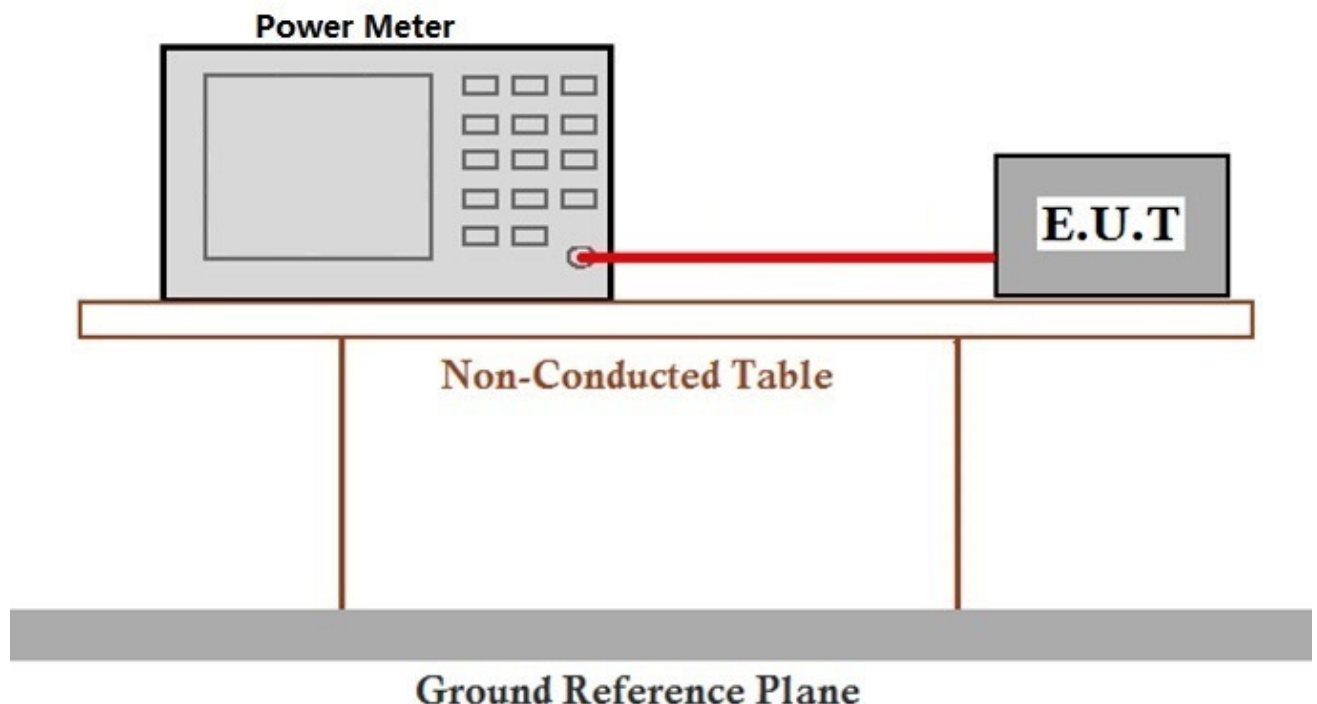
g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a;

MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40); MCS0 of rate is the worst case of 802.11ac(HT20); MCS0 of rate is the worst case of 802.11ac(HT40); MCS0 of rate is the worst case of 802.11ac(HT80)

Only the worst case is recorded in the report.

7.4.2 Test Setup Diagram



7.4.3 Measurement Data

The detailed test data see: Appendix 15.407



7.5 Peak Power spectrum density

Test Requirement 47 CFR Part 15, Subpart E 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.	

7.5.1 E.U.T. Operation

Operating Environment:

Temperature: 23 °C Humidity: 56 % RH Atmospheric Pressure: 1020 mbar

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

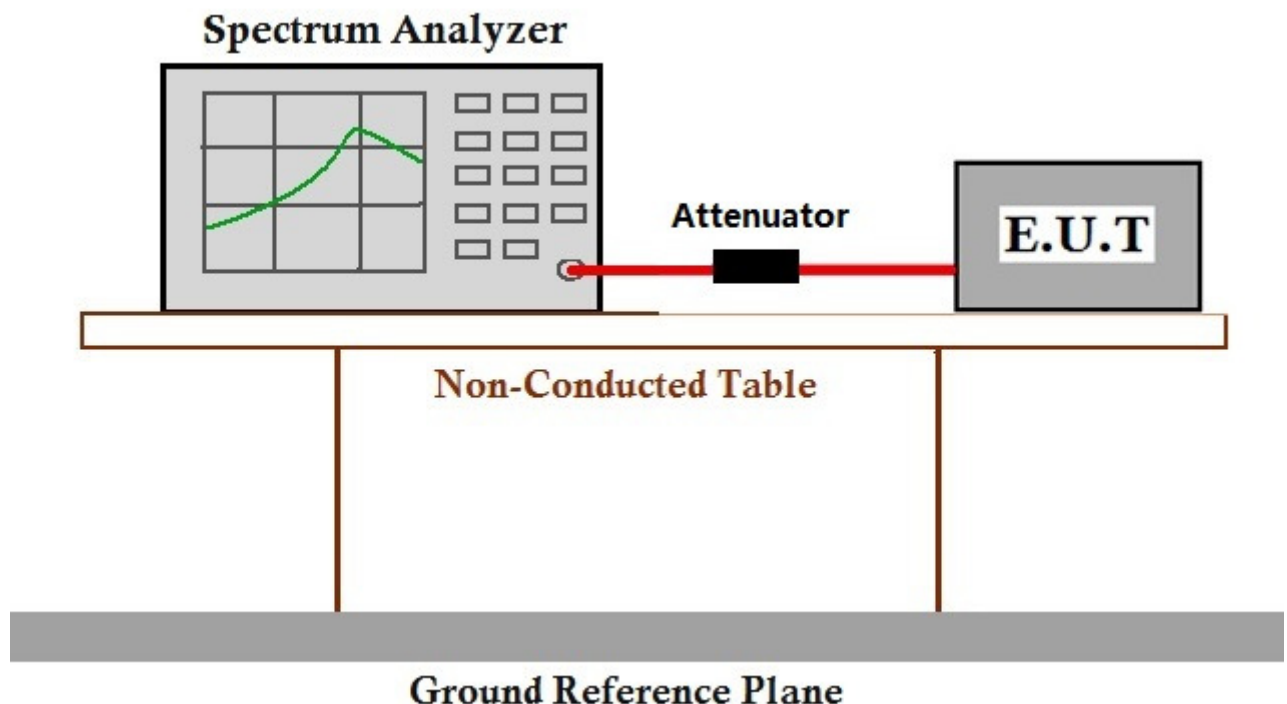
g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a;

MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40); MCS0 of rate is the worst case of 802.11ac(HT20); MCS0 of rate is the worst case of 802.11ac(HT40); MCS0 of rate is the worst case of 802.11ac(HT80)

Only the worst case is recorded in the report.

7.5.2 Test Setup Diagram



7.5.3 Measurement Data

The detailed test data see: Appendix 15.407



7.6 Restricted bands around fundamental frequency (Radiated Emission)

Test Requirement 47 CFR Part 15 Section 15.407(b)

Test Method: KDB 789033 D02 II G

Measurement Distance: 3m

Limit:

Frequency	Limit (dBuV/m @3m)	Remark
30MHz-88MHz	40.0	Quasi-peak Value
88MHz-216MHz	43.5	Quasi-peak Value
216MHz-960MHz	46.0	Quasi-peak Value
960MHz-1GHz	54.0	Quasi-peak Value
Above 1GHz	54.0	Average Value
	74.0	Peak Value

7.6.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 54 % RH Atmospheric Pressure: 1020 mbar

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

Pretest these mode to find the worst case:

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

The worst case for final test:

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

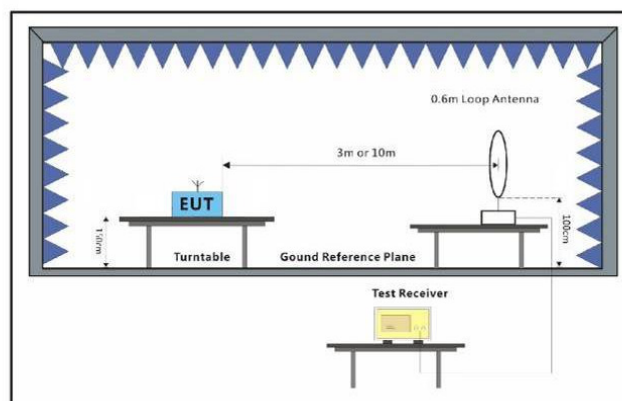
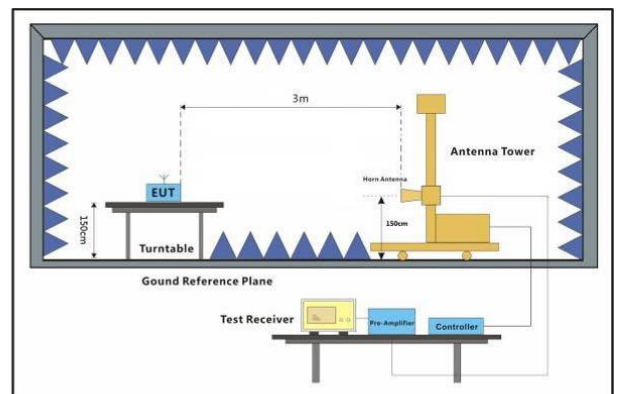
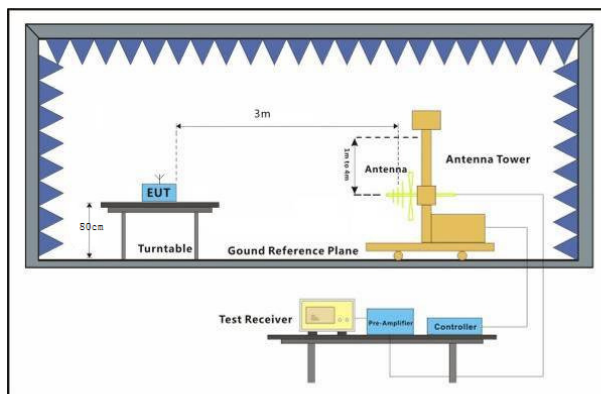
d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a;
MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40); MCS0 of rate is the worst case of 802.11ac(HT20); MCS0 of rate is the worst case of 802.11ac(HT40); MCS0 of rate is the worst case of 802.11ac(HT80), Only the worst case is recorded in the report.

7.6.2 Test Setup Diagram





7.6.3 Measurement 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.

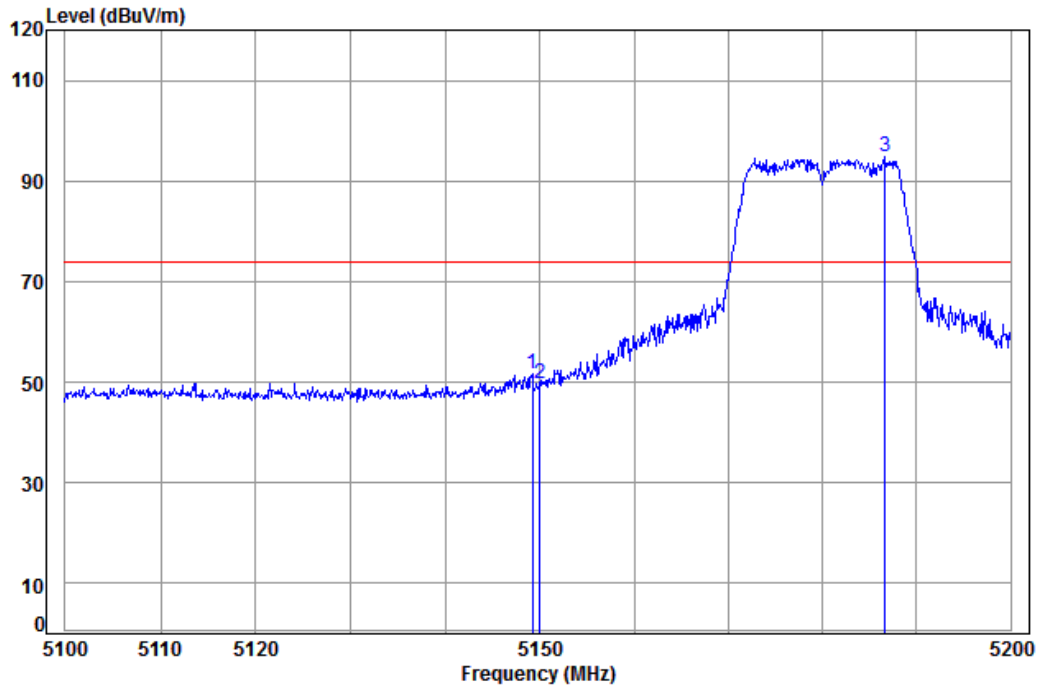


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Shenzhen Branch

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



Condition: 3m HORIZONTAL

Job No: : LS9

Mode: : 5180 Bandedge

: WIFI-A20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5149.157	8.08	34.08	38.47	47.93	51.62	74.00	-22.38	
2	5150.000	8.08	34.07	38.47	46.18	49.86	74.00	-24.14	
3 pp	5186.588	8.10	34.02	38.46	91.05	94.71	74.00	20.71	

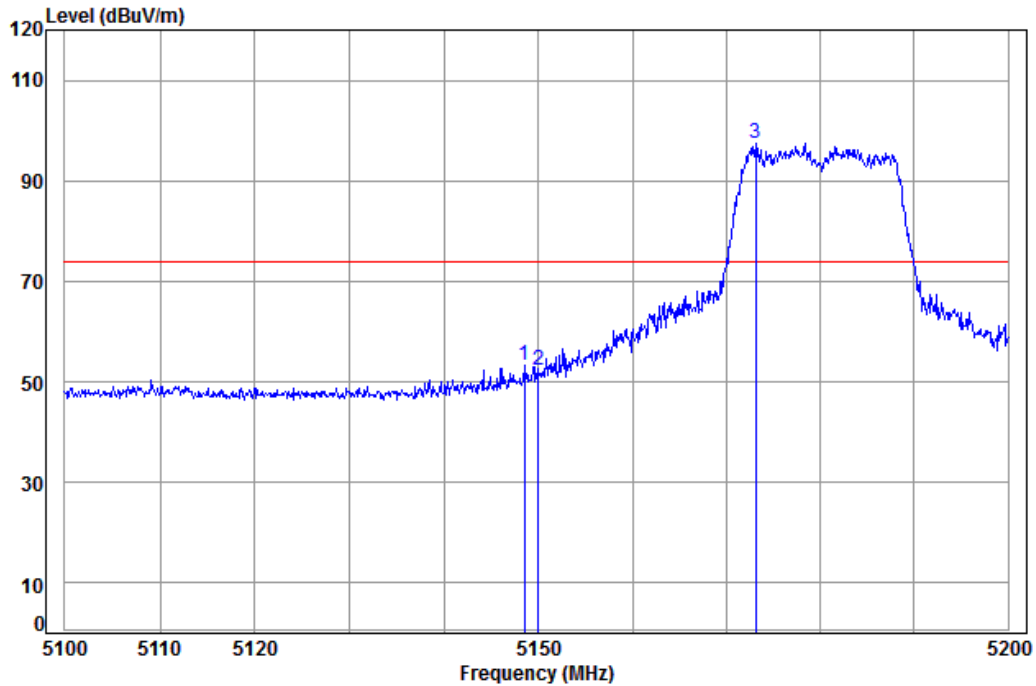


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Shenzhen Branch

Report No.: SZEM170200069905

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



Condition: 3m VERTICAL

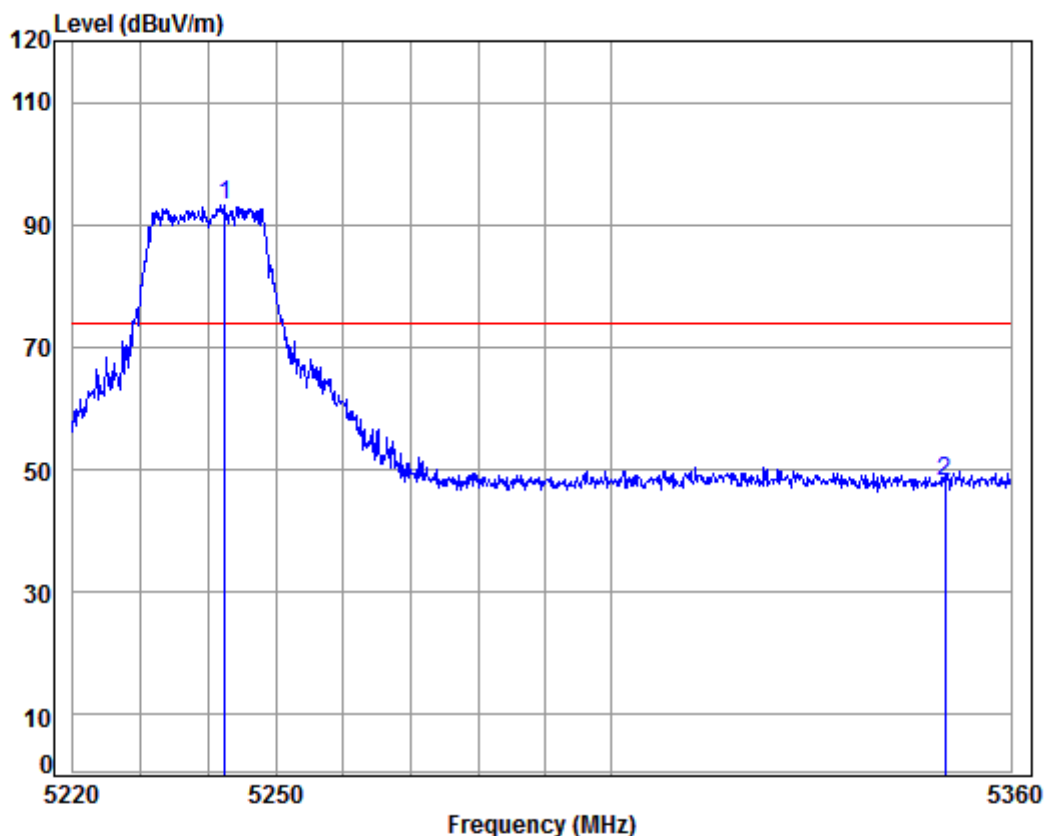
Job No: : LS9

Mode: : 5180 Bandedge

: WIFI-A20

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5148.458	8.08	34.08	38.47	49.77	53.46	74.00	-20.54
2	5150.000	8.08	34.07	38.47	48.48	52.16	74.00	-21.84
3 pp	5173.110	8.09	34.04	38.47	93.85	97.51	74.00	23.51

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



Condition: 3m Horizontal

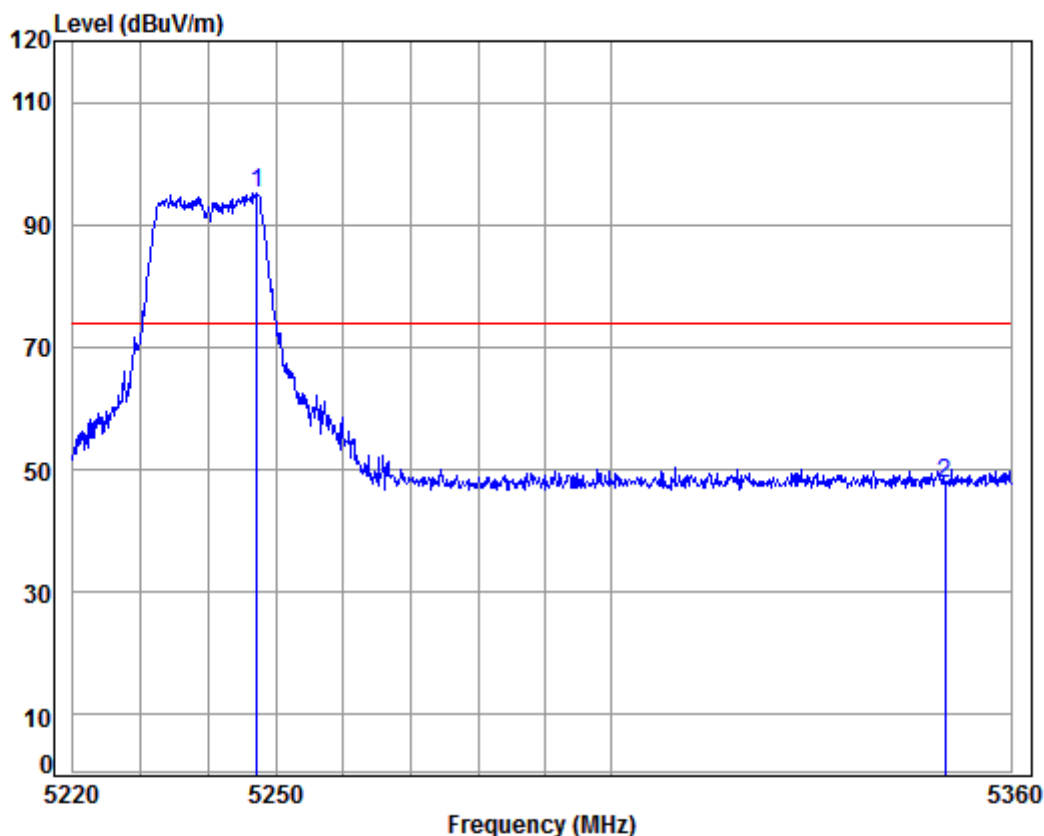
Job No: : LS9

Mode: : 5240 Bandedge

: WIFI-A20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5242.429	8.12	34.45	38.45	89.14	93.26	74.00	19.26	
2	5350.000	8.18	34.43	38.43	43.80	47.98	74.00	-26.02	

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



Condition: 3m VERTICAL

Job No: : LS9

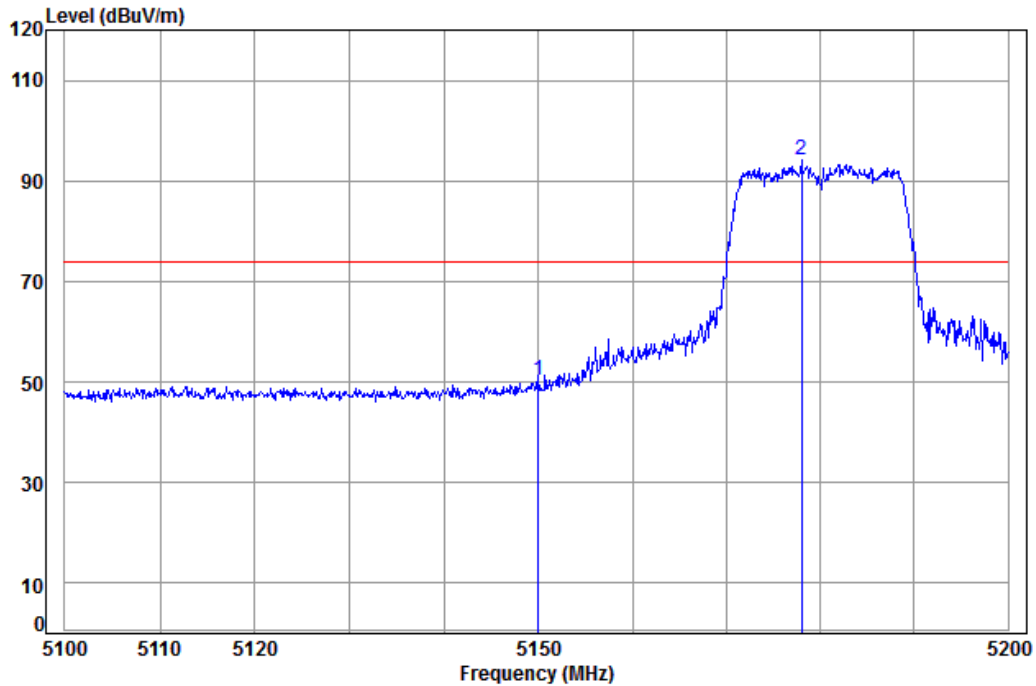
Mode: : 5240 Bandedge

: WIFI-A20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5247.149	8.13	34.45	38.45	91.06	95.19	74.00	21.19	
2	5350.000	8.18	34.43	38.43	43.59	47.77	74.00	-26.23	



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



Condition: 3m HORIZONTAL

Job No: : LS9

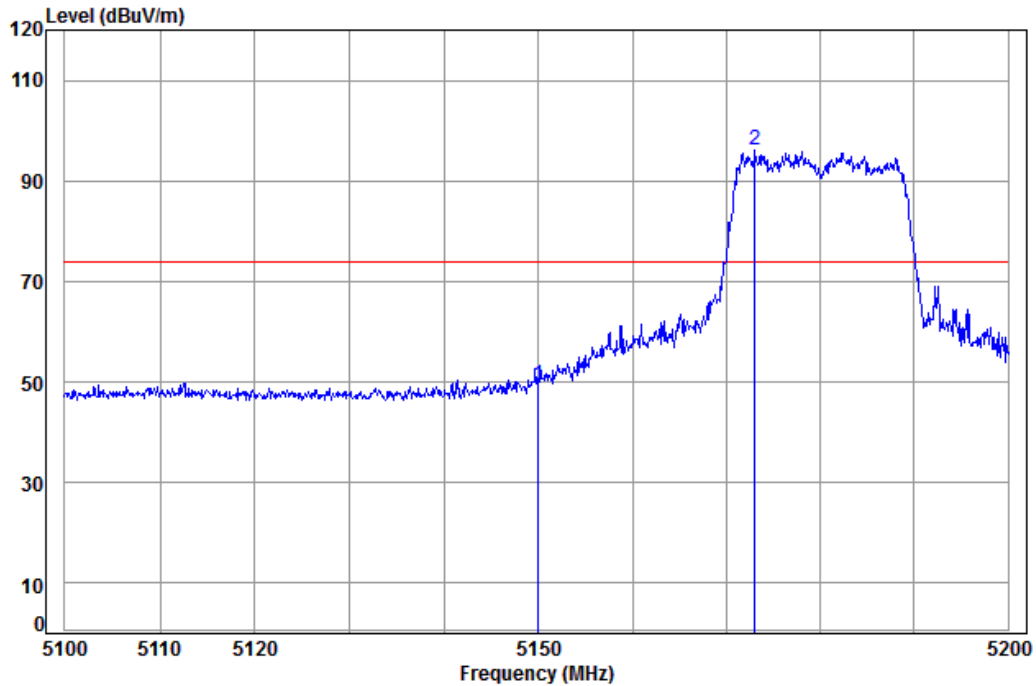
Mode: : 5180 Bandedge

: WIFI-N20

	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	5150.000	8.08	34.07	38.47	46.63	50.31	74.00	-23.69	
2	5177.934	8.09	34.03	38.46	90.40	94.06	74.00	20.06	



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



Condition: 3m VERTICAL

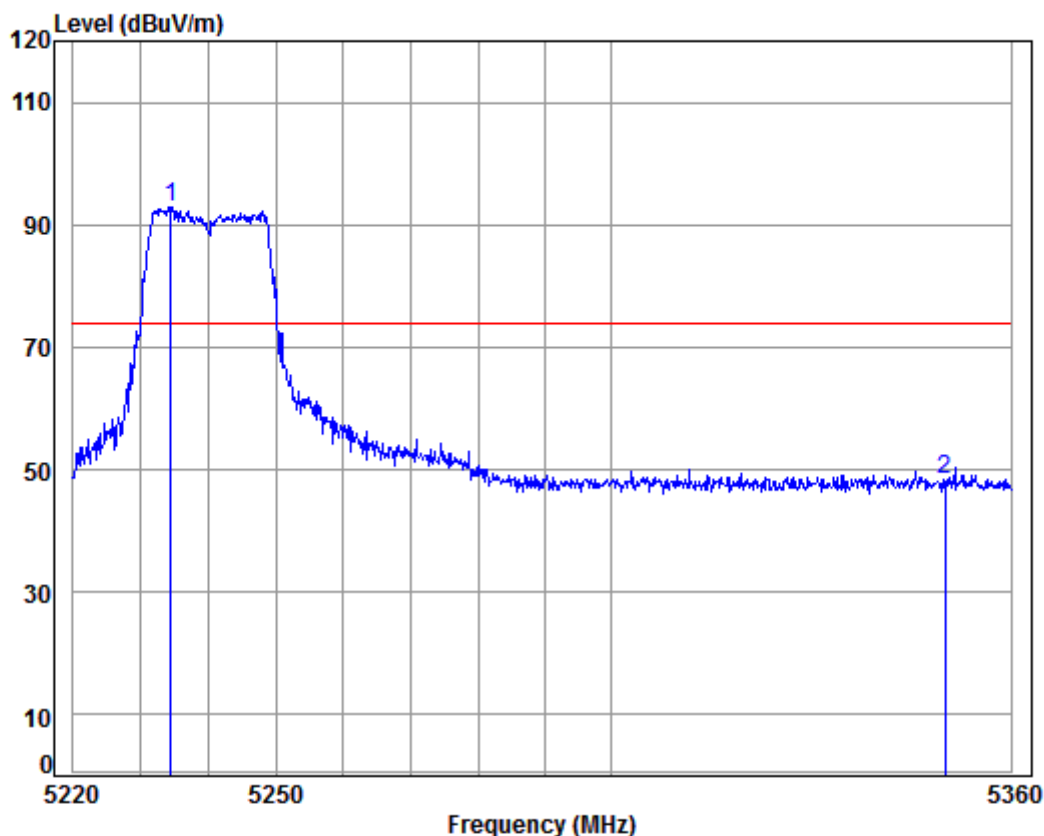
Job No: : LS9

Mode: : 5180 Bandedge

: WIFI-N20

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.000	8.08	34.07	38.47	45.58	49.26	74.00	-24.74
2	pp 5173.009	8.09	34.04	38.47	92.54	96.20	74.00	22.20

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



Condition: 3m HORIZONTAL

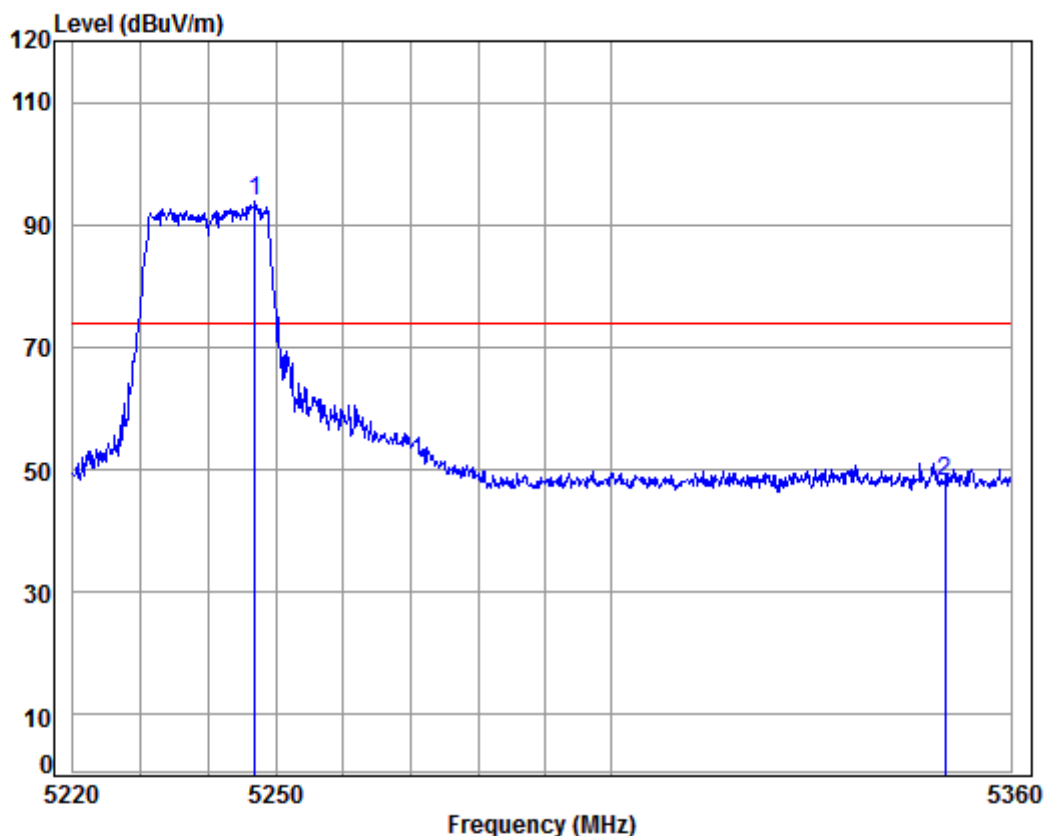
Job No: : LS9

Mode: : 5240 Bandedge

: WIFI-N20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5234.388	8.12	34.45	38.45	88.85	92.97	74.00	18.97	
2	5350.000	8.18	34.43	38.43	44.08	48.26	74.00	-25.74	

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



Condition: 3m VERTICAL

Job No: : LS9

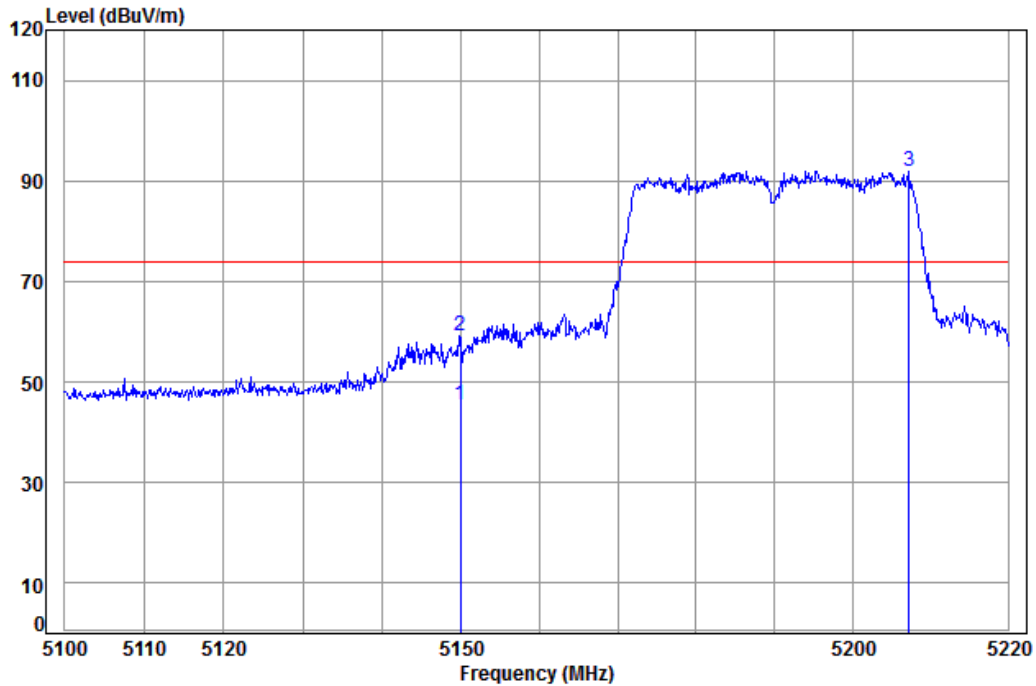
Mode: : 5240 Bandedge

: WIFI-N20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5246.871	8.13	34.45	38.45	89.56	93.69	74.00	19.69	
2	5350.000	8.18	34.43	38.43	43.78	47.96	74.00	-26.04	



Mode:c; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low



Condition: 3m HORIZONTAL

Job No: : LS9

Mode: : 5190 Bandedge

: WIFI-N40

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 av	5150.000	8.08	34.07	38.47	41.83	45.51	54.00	-8.49 Average
2 pk	5150.000	8.08	34.07	38.47	55.66	59.34	74.00	-14.66 Peak
3 pp	5207.269	8.11	34.01	38.46	88.37	92.03	74.00	18.03

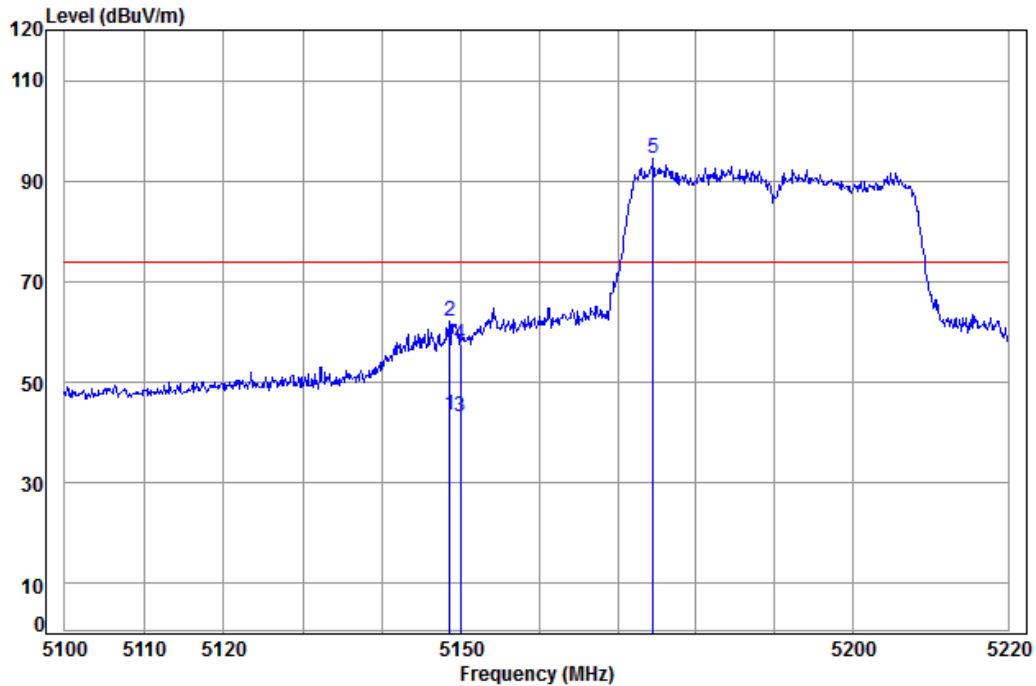


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Mode:c; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low



Condition: 3m VERTICAL

Job No: : LS9

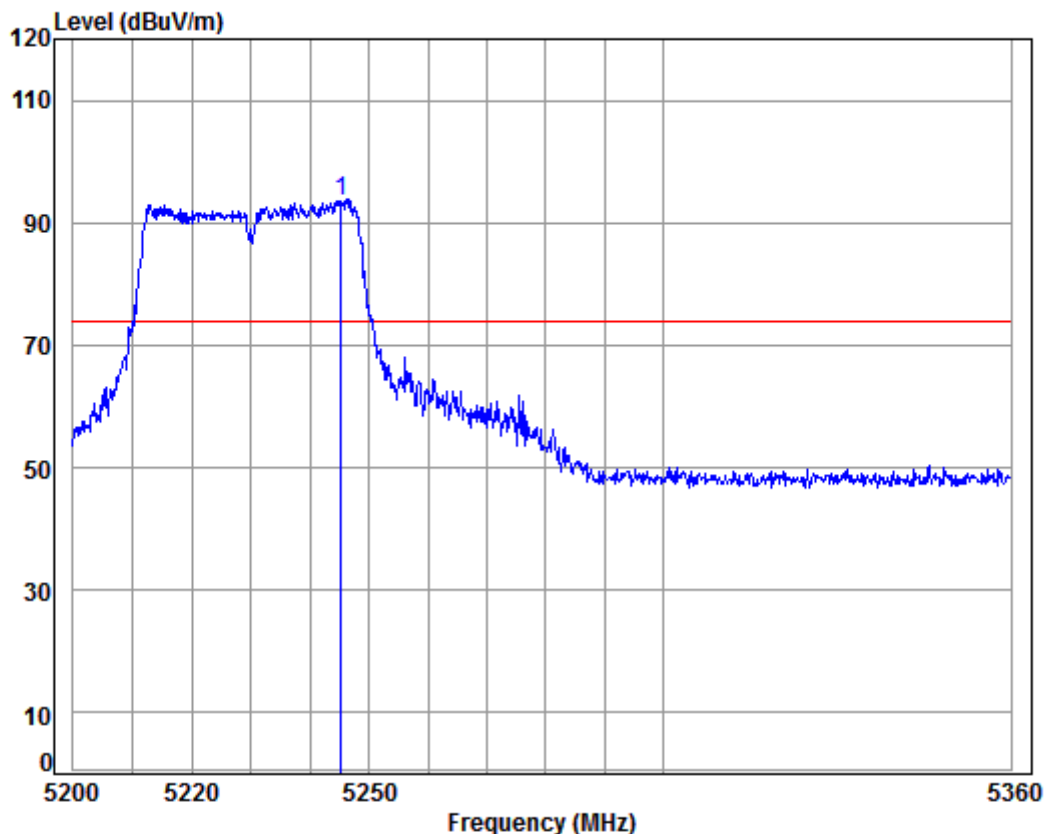
Mode: : 5190 Bandedge

: WIFI-N40

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 av	5148.623	8.08	34.08	38.47	39.84	43.53	54.00	-10.47 Average
2 pk	5148.623	8.08	34.08	38.47	58.44	62.13	74.00	-11.87 Peak
3	5150.000	8.08	34.07	38.47	39.37	43.05	54.00	-10.95 Average
4	5150.000	8.08	34.07	38.47	53.91	57.59	74.00	-16.41 Peak
5 pp	5174.552	8.09	34.04	38.47	90.75	94.41	74.00	20.41



Mode:c; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:High



Condition: 3m HORIZONTAL

Job No: : LS9

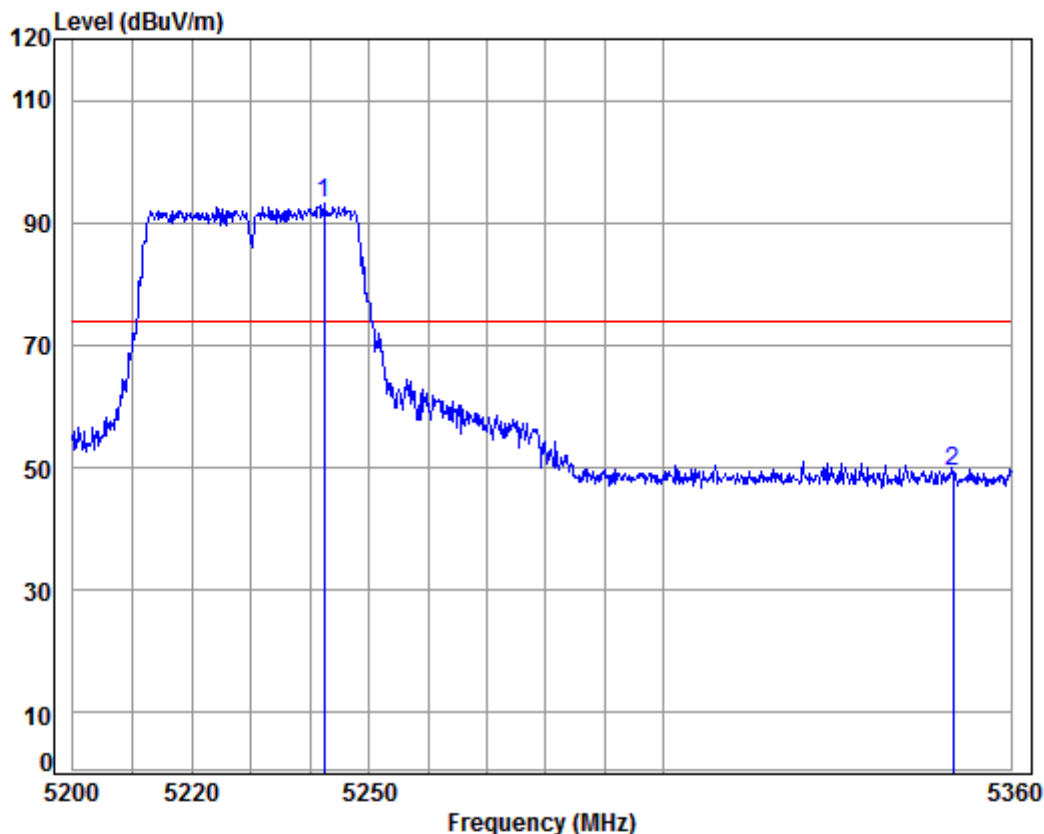
Mode: : 5230 Bandedge

: WIFI-N40

	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	5245.266	8.13	34.45	38.45	89.49	93.62	74.00	19.62	



Mode:c; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:High



Condition: 3m VERTICAL
Job No: : LS9
Mode: : 5230 Bandedge
: WIFI-N40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5242.405	8.12	34.45	38.45	88.91	93.03	74.00	19.03	
2	5350.000	8.18	34.43	38.43	45.17	49.35	74.00	-24.65	

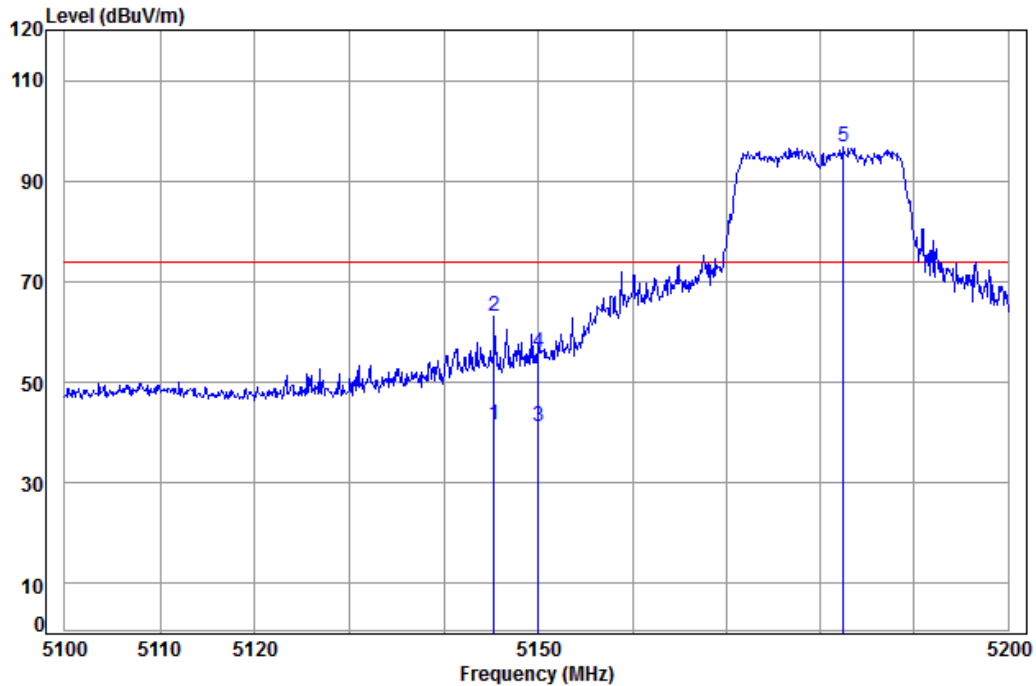


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM170200069905

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



Condition: 3m HORIZONTAL

Job No: : LS9

Mode: : 5180 Bandedge

: WIFI-AC20

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 av	5145.259	8.08	34.08	38.47	37.83	41.52	54.00	-12.48 Average
2 pk	5145.259	8.08	34.08	38.47	59.57	63.26	74.00	-10.74 Peak
3	5150.000	8.08	34.07	38.47	37.61	41.29	54.00	-12.71 Average
4	5150.000	8.08	34.07	38.47	52.18	55.86	74.00	-18.14 Peak
5 pp	5182.460	8.09	34.03	38.46	93.18	96.84	74.00	22.84

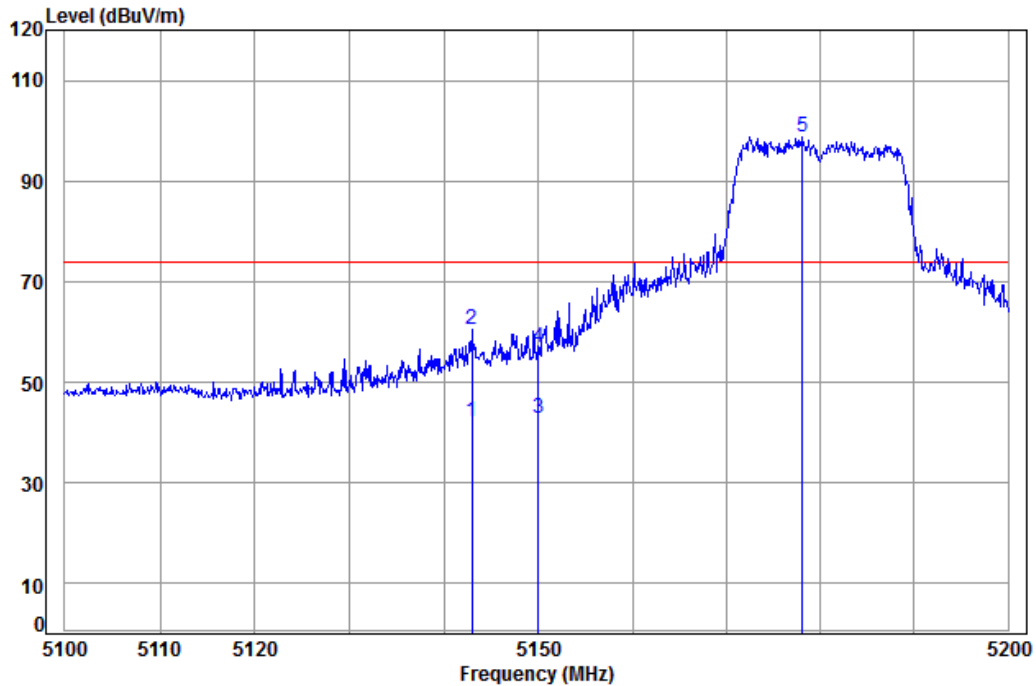


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM170200069905

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



Condition: 3m VERTICAL

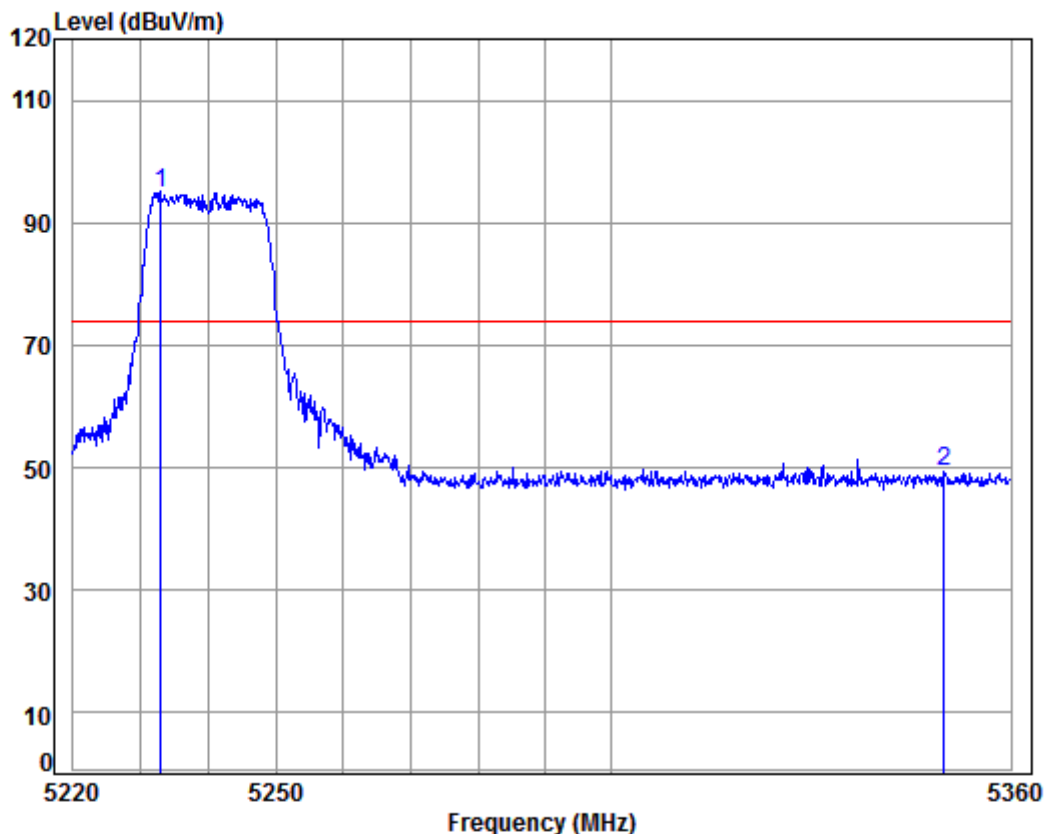
Job No: : LS9

Mode: : 5180 Bandedge

: WIFI-AC20

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5142.962	8.07	34.08	38.47	38.53	42.21	54.00	-11.79 Average
2	pk 5142.962	8.07	34.08	38.47	56.96	60.64	74.00	-13.36 Peak
3	av 5150.000	8.08	34.07	38.47	39.19	42.87	54.00	-11.13 Average
4	5150.000	8.08	34.07	38.47	53.34	57.02	74.00	-16.98 Peak
5	pp 5178.034	8.09	34.03	38.46	95.19	98.85	74.00	24.85

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



Condition: 3m HORIZONTAL

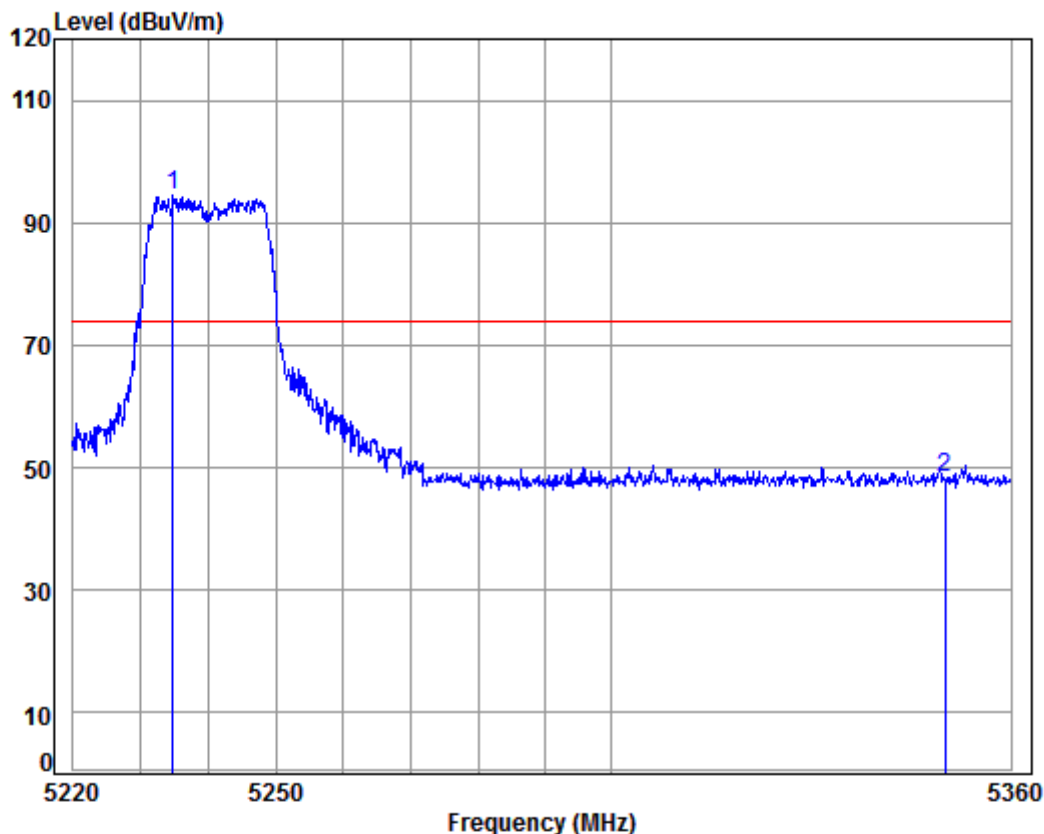
Job No: : LS9

Mode: : 5240 Bandedge

: WIFI-AC20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5233.003	8.12	34.45	38.45	90.83	94.95	74.00	20.95	
2	5349.938	8.18	34.43	38.43	45.24	49.42	74.00	-24.58	

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



Condition: 3m VERTICAL

Job No: : LS9

Mode: : 5240 Bandedge

: WIFI-AC20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5234.804	8.12	34.45	38.45	90.49	94.61	74.00	20.61	
2	5350.000	8.18	34.43	38.43	44.17	48.35	74.00	-25.65	

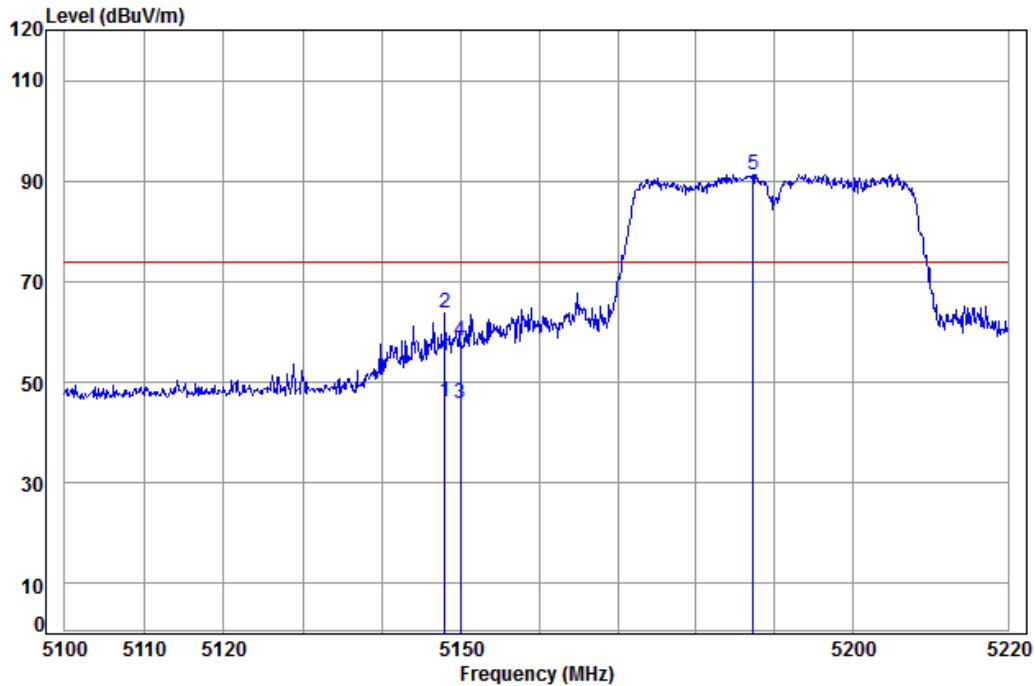


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM170200069905

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Mode:c; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low



Condition: 3m HORIZONTAL

Job No: : LS9

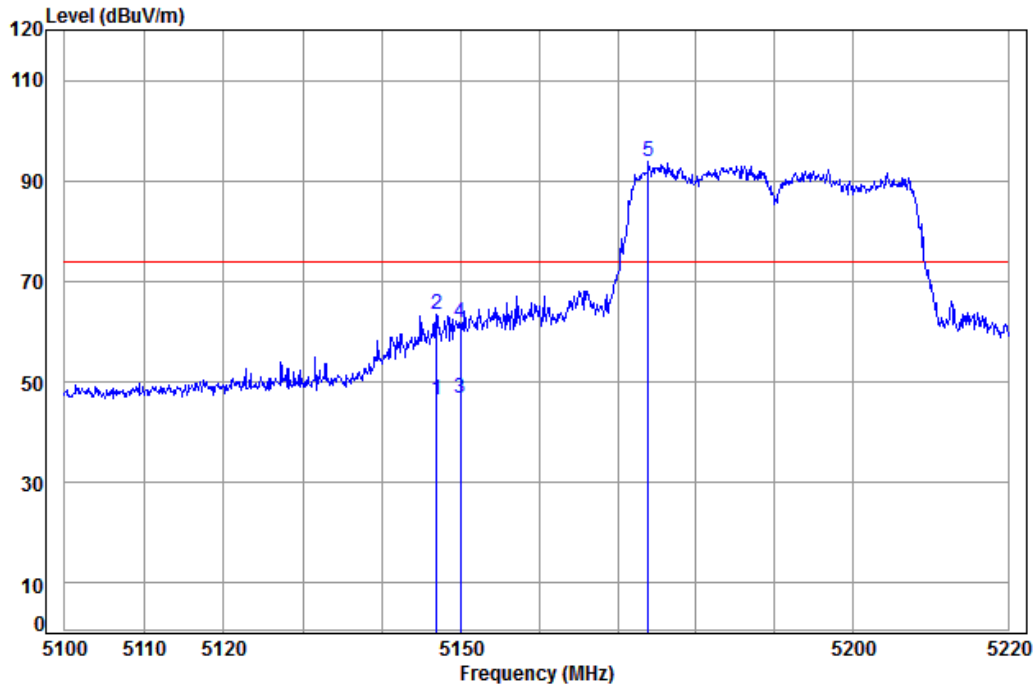
Mode: : 5190 Bandedge

: WIFI-AC40

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 av	5148.024	8.08	34.08	38.47	42.36	46.05	54.00	-7.95 Average
2 pk	5148.024	8.08	34.08	38.47	59.97	63.66	74.00	-10.34 Peak
3	5150.000	8.08	34.07	38.47	42.12	45.80	54.00	-8.20 Average
4	5150.000	8.08	34.07	38.47	54.36	58.04	74.00	-15.96 Peak
5 pp	5187.325	8.10	34.02	38.46	87.72	91.38	74.00	17.38



Mode:c; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low



Condition: 3m VERTICAL

Job No: : LS9

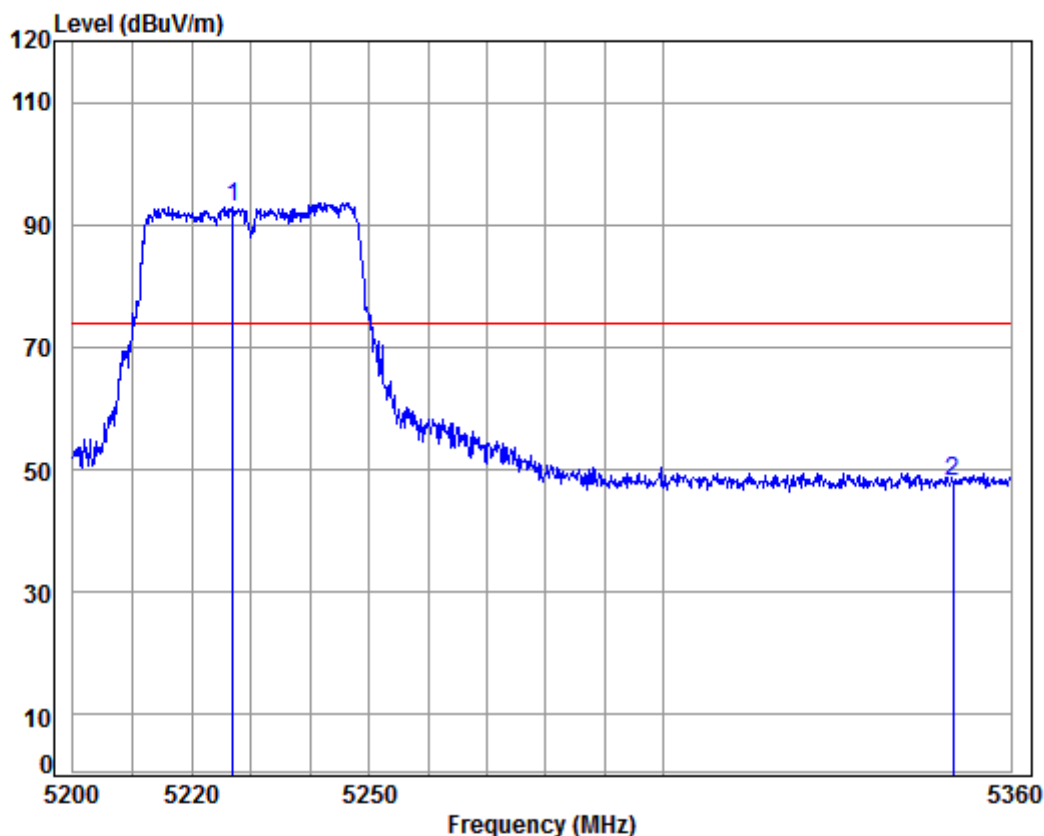
Mode: : 5190 Bandedge

: WIFI-AC40

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5146.947	8.08	34.08	38.47	42.58	46.27	54.00	-7.73 Average
2	pk 5146.947	8.08	34.08	38.47	59.81	63.50	74.00	-10.50 Peak
3	av 5150.000	8.08	34.07	38.47	42.97	46.65	54.00	-7.35 Average
4	5150.000	8.08	34.07	38.47	58.03	61.71	74.00	-12.29 Peak
5	pp 5173.951	8.09	34.04	38.47	90.02	93.68	74.00	19.68



Mode:c; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High



Condition: 3m HORIZONTAL

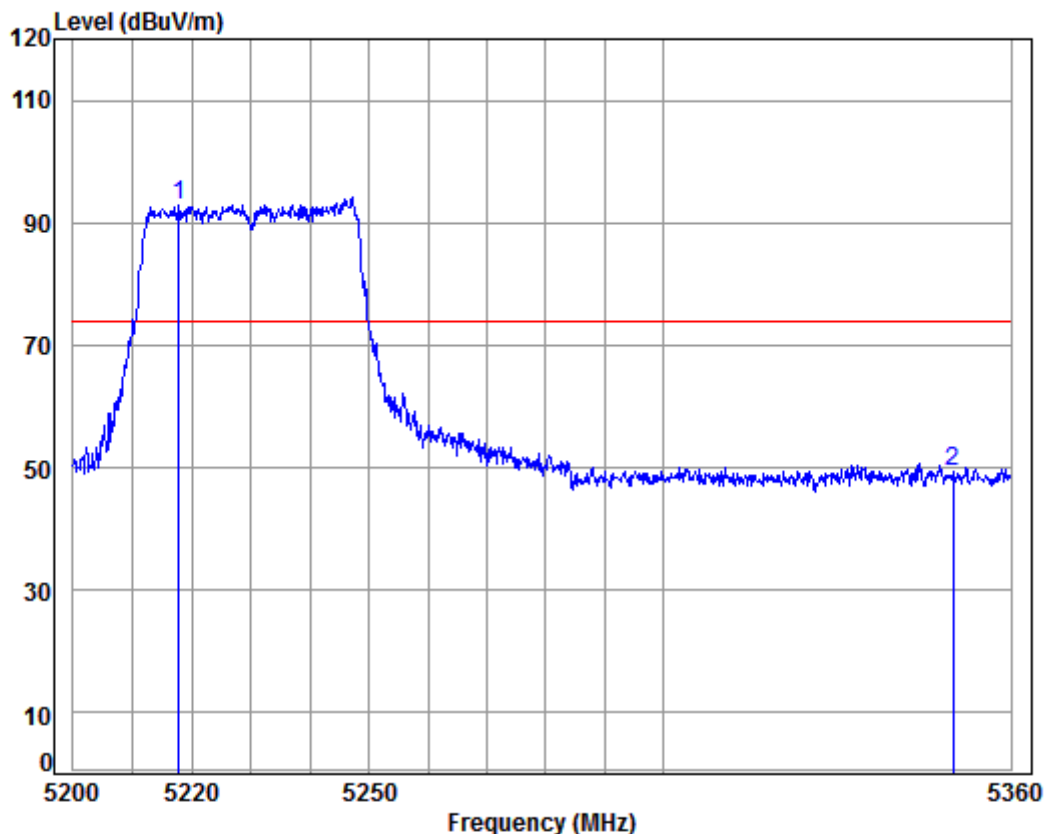
Job No: : LS9

Mode: : 5230 Bandedge

: WIFI-AC40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5227.018	8.12	34.45	38.45	88.86	92.98	74.00	18.98	
2	5350.000	8.18	34.43	38.43	43.99	48.17	74.00	-25.83	

Mode:c; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High



Condition: 3m VERTICAL

Job No: : LS9

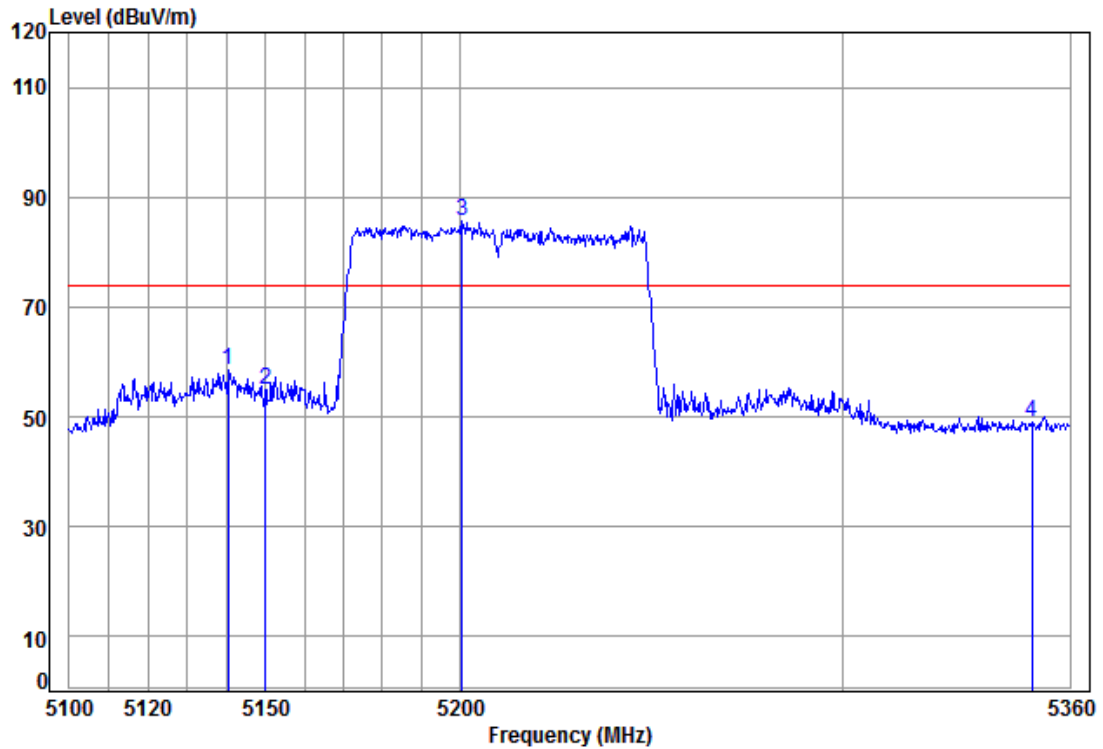
Mode: : 5230 Bandedge

: WIFI-AC40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5217.838	8.11	34.46	38.46	88.80	92.91	74.00	18.91	
2	5350.000	8.18	34.43	38.43	45.27	49.45	74.00	-24.55	



Mode:c; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:80MHz;



Condition: 3m HORIZONTAL

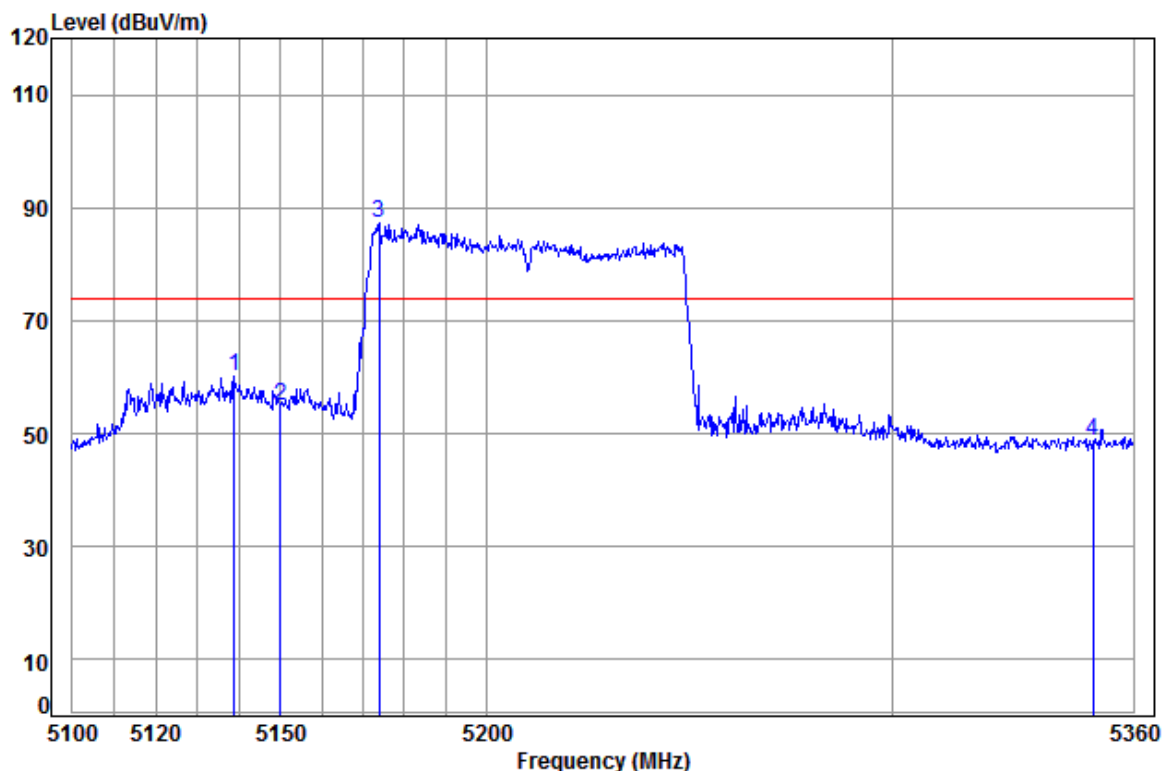
Job No: : LS9

Mode: : 5210 Bandedge

: WIFI-AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5140.480	8.07	34.09	38.47	54.76	58.45	74.00	-15.55	
2	5150.000	8.08	34.07	38.47	51.28	54.96	74.00	-19.04	
3 pp	5200.641	8.10	34.00	38.46	82.05	85.69	74.00	11.69	
4	5350.000	8.18	34.30	38.43	44.89	48.94	74.00	-25.06	

Mode:c; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:80MHz;



Condition: 3m VERTICAL

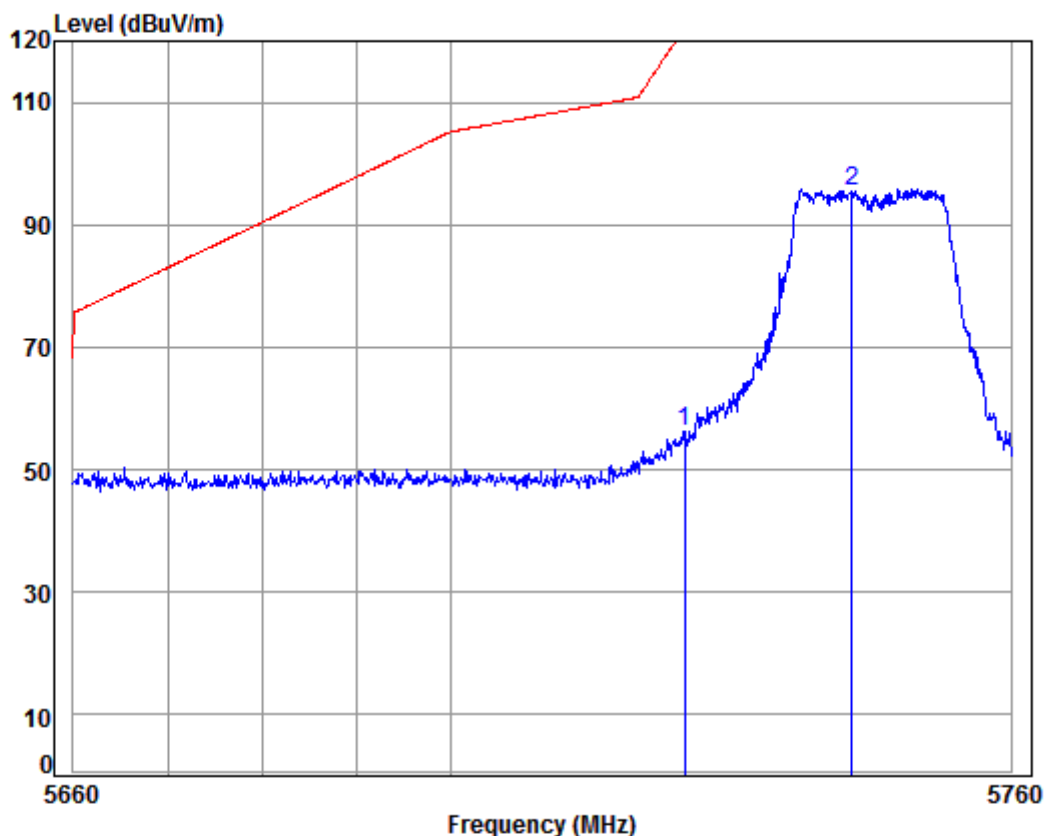
Job No: : LS9

Mode: : 5210 Bandedge

: WIFI-AC80

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5138.947	8.07	34.09	38.47	56.32	60.01	74.00	-13.99
2	5150.000	8.08	34.07	38.47	51.16	54.84	74.00	-19.16
3 pp	5173.816	8.09	34.04	38.47	83.59	87.25	74.00	13.25
4	5350.000	8.18	34.30	38.43	44.69	48.74	74.00	-25.26

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



Condition: 3m HORIZONTAL

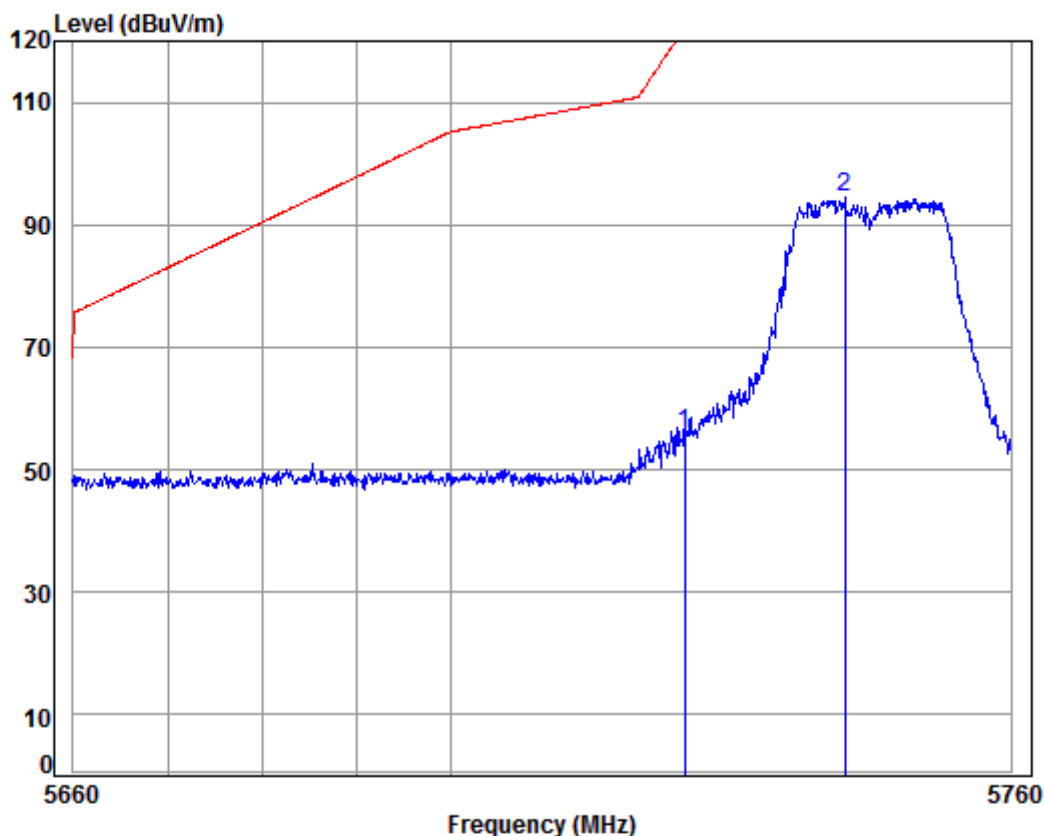
Job No: : LS9

Mode: : 5745 Bandedge

: WIFI-A20

	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	5725.000	8.48	34.54	38.35	51.55	56.22	122.20	-65.98	
2 pp	5742.876	8.50	34.55	38.35	90.89	95.59	125.20	-29.61	

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



Condition: 3m VERTICAL

Job No: : LS9

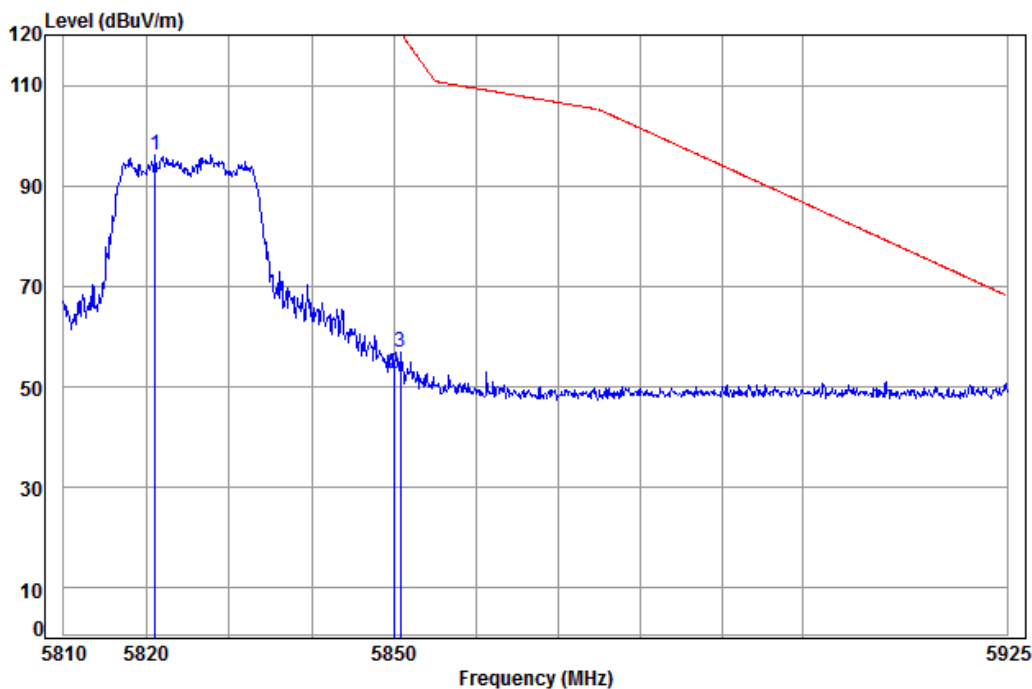
Mode: : 5745 Bandedge

: WIFI-A20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	38.35	51.13	55.80	122.20	-66.40	
2	pp 5742.172	8.50	34.55	38.35	89.77	94.47	125.20	-30.73	



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



Condition: 3m HORIZONTAL

Job No: : LS9

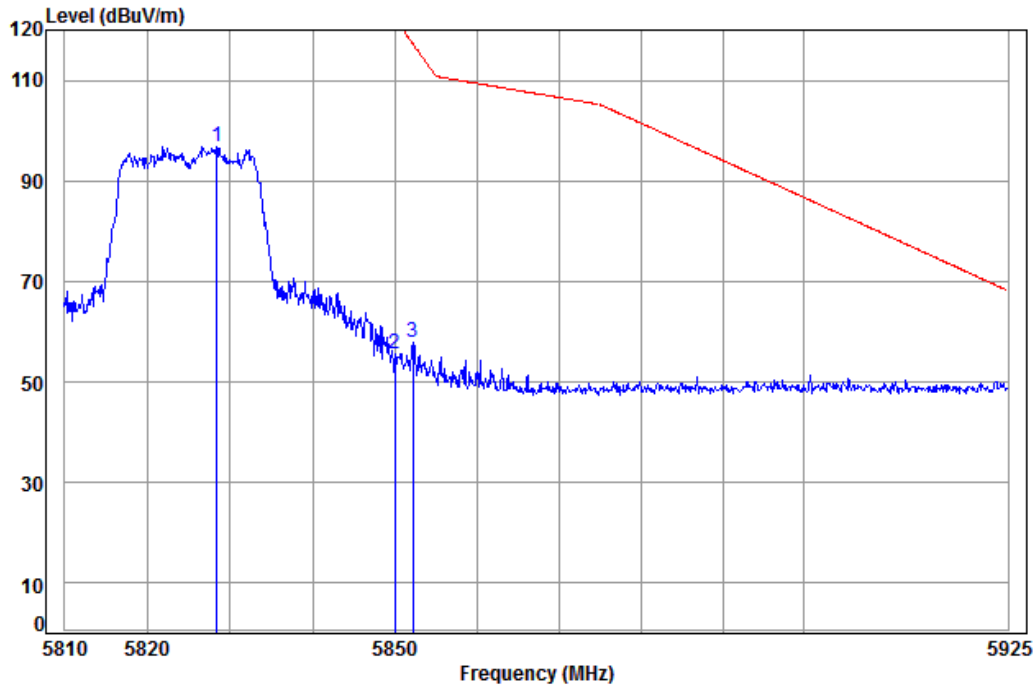
Mode: : 5825 Bandedge

: WIFI-A20

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5821.057	8.58	34.25	38.34	91.74	96.23	125.20	-28.97
2	5850.000	8.60	34.33	38.33	47.93	52.53	122.20	-69.67
3	5850.796	8.61	34.33	38.33	52.28	56.89	120.38	-63.49



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



Condition: 3m VERTICAL

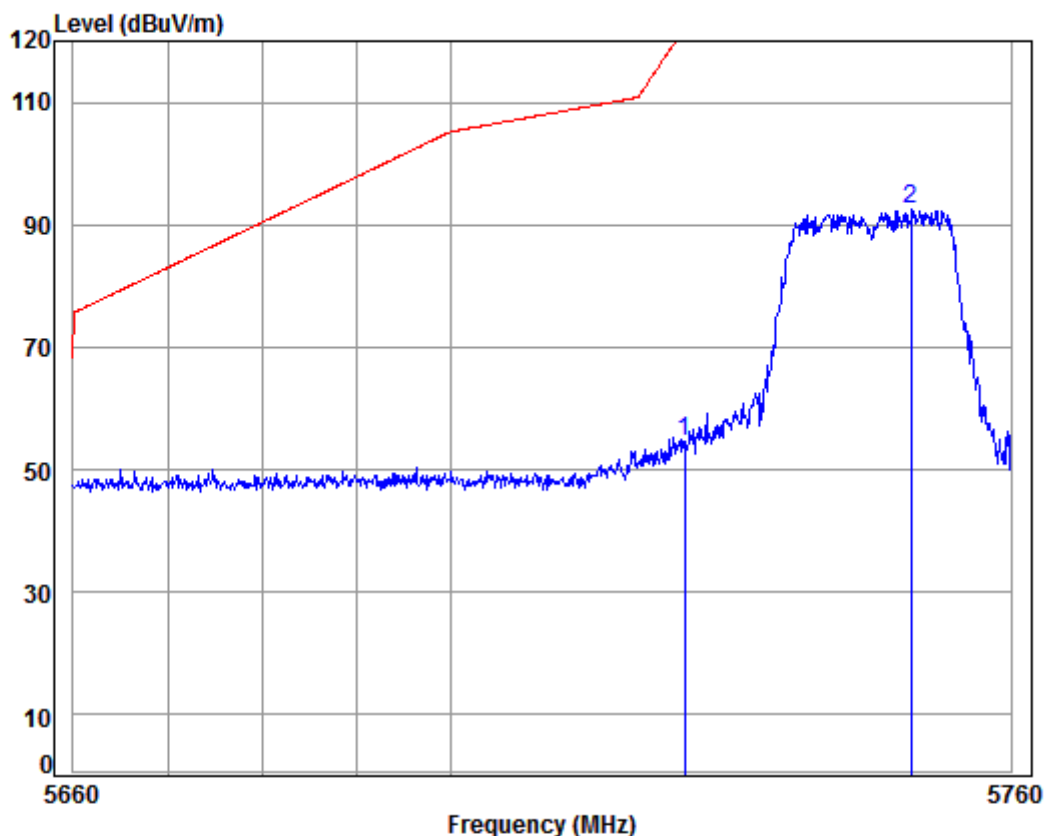
Job No: : LS9

Mode: : 5825 Bandedge

: WIFI-A20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5828.363	8.58	34.27	38.33	92.41	96.93	125.20	-28.27	
2	5850.000	8.60	34.33	38.33	51.08	55.68	122.20	-66.52	
3	5852.173	8.61	34.33	38.33	53.14	57.75	117.25	-59.50	

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



Condition: 3m HORIZONTAL

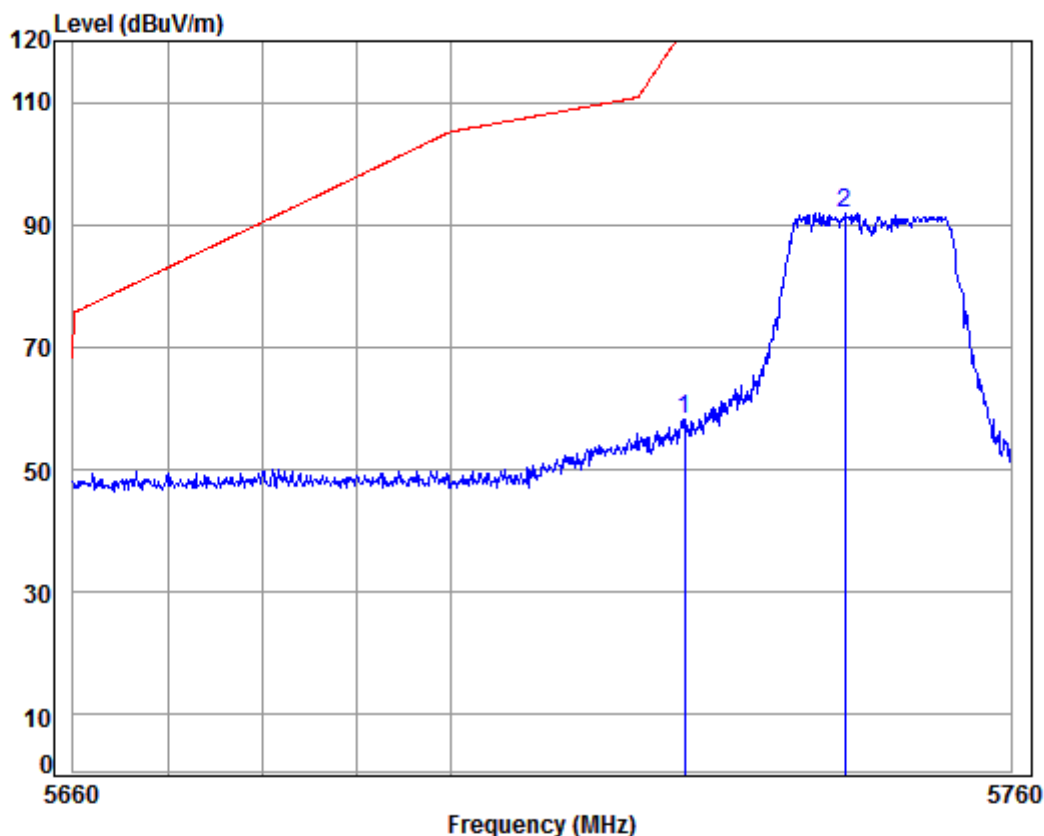
Job No: : LS9

Mode: : 5745 Bandedge

: WIFI-N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	38.35	49.86	54.53	122.20	-67.67	
2 pp	5749.317	8.50	34.55	38.35	87.78	92.48	125.20	-32.72	

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



Condition: 3m VERTICAL

Job No: : LS9

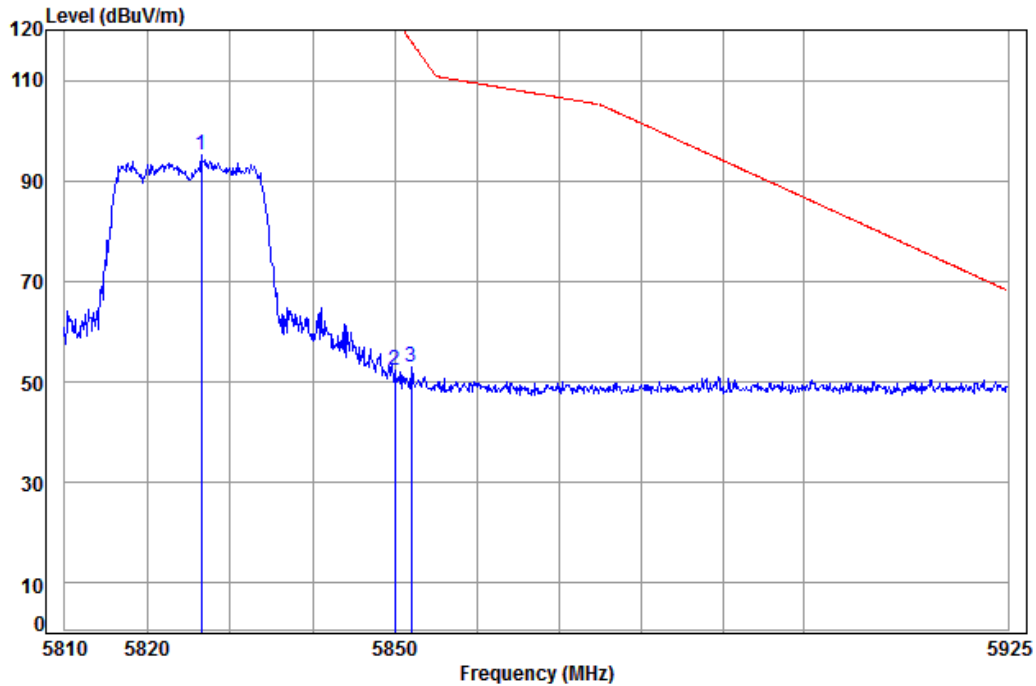
Mode: : 5745 Bandedge

: WIFI-N20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	38.35	53.46	58.13	122.20	-64.07	
2 pp	5742.172	8.50	34.55	38.35	87.26	91.96	125.20	-33.24	



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



Condition: 3m HORIZONTAL

Job No: : LS9

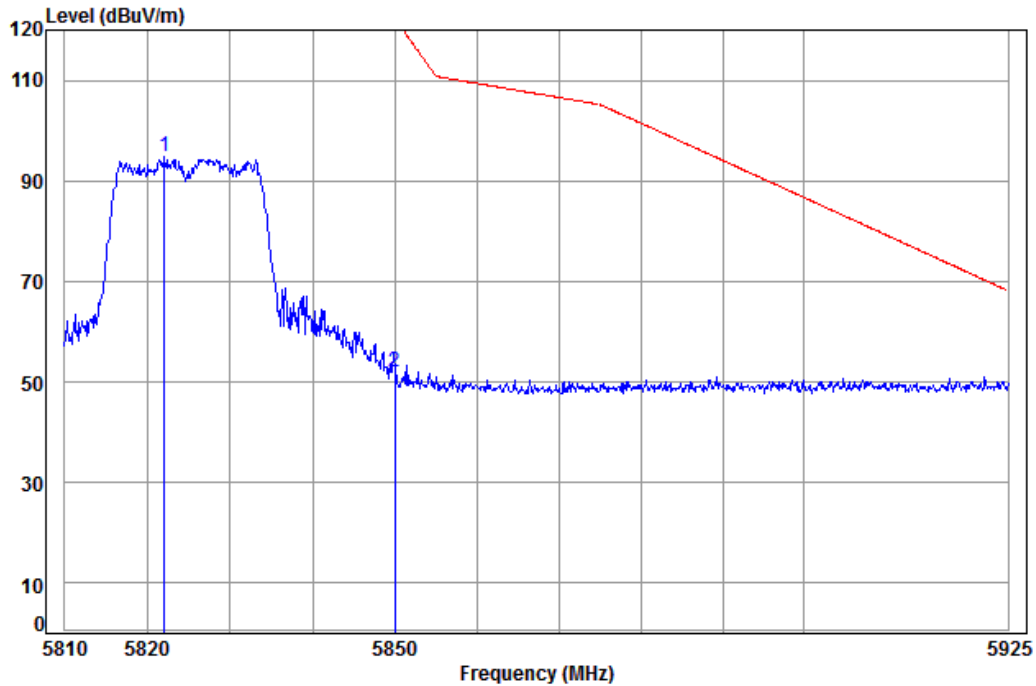
Mode: : 5825 Bandedge

: WIFI-N20

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5826.536	8.58	34.27	38.33	90.54	95.06	125.20	-30.14
2	5850.000	8.60	34.33	38.33	47.59	52.19	122.20	-70.01
3	5851.943	8.61	34.33	38.33	48.40	53.01	117.77	-64.76



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



Condition: 3m VERTICAL

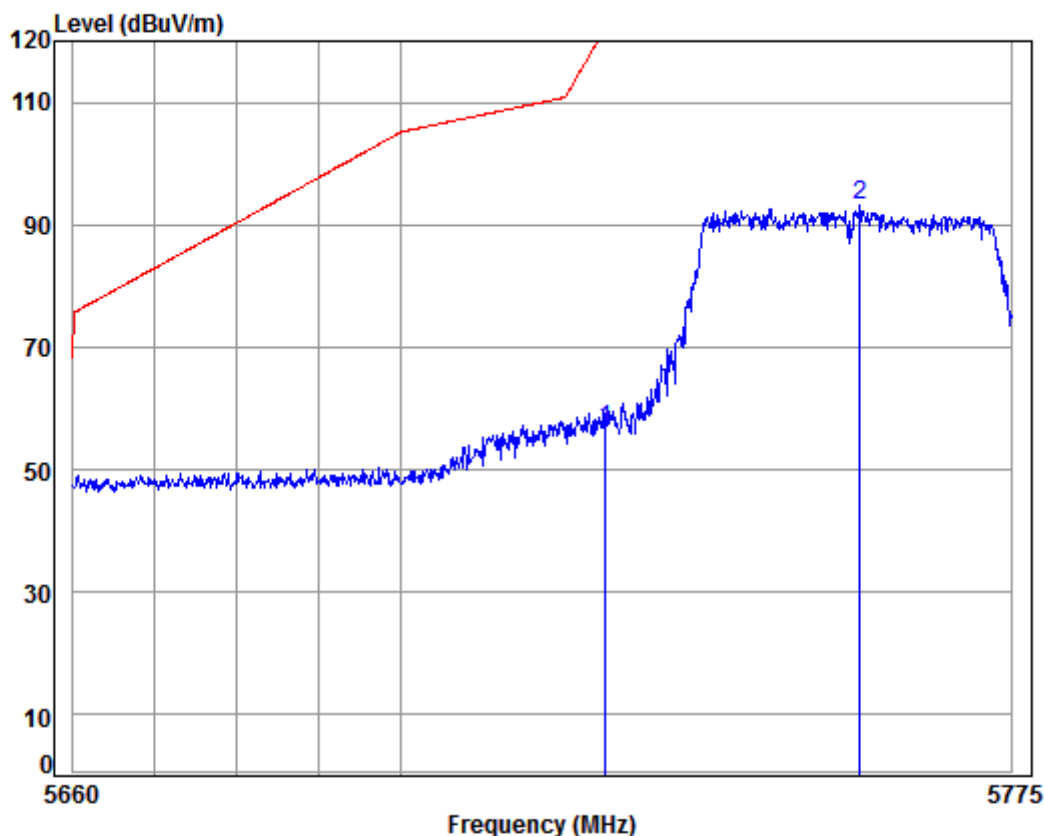
Job No: : LS9

Mode: : 5825 Bandedge

: WIFI-N20

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5822.083	8.58	34.26	38.34	90.39	94.89	125.20	-30.31
2	5850.000	8.60	34.33	38.33	47.40	52.00	122.20	-70.20

Mode:d; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low



Condition: 3m HORIZONTAL

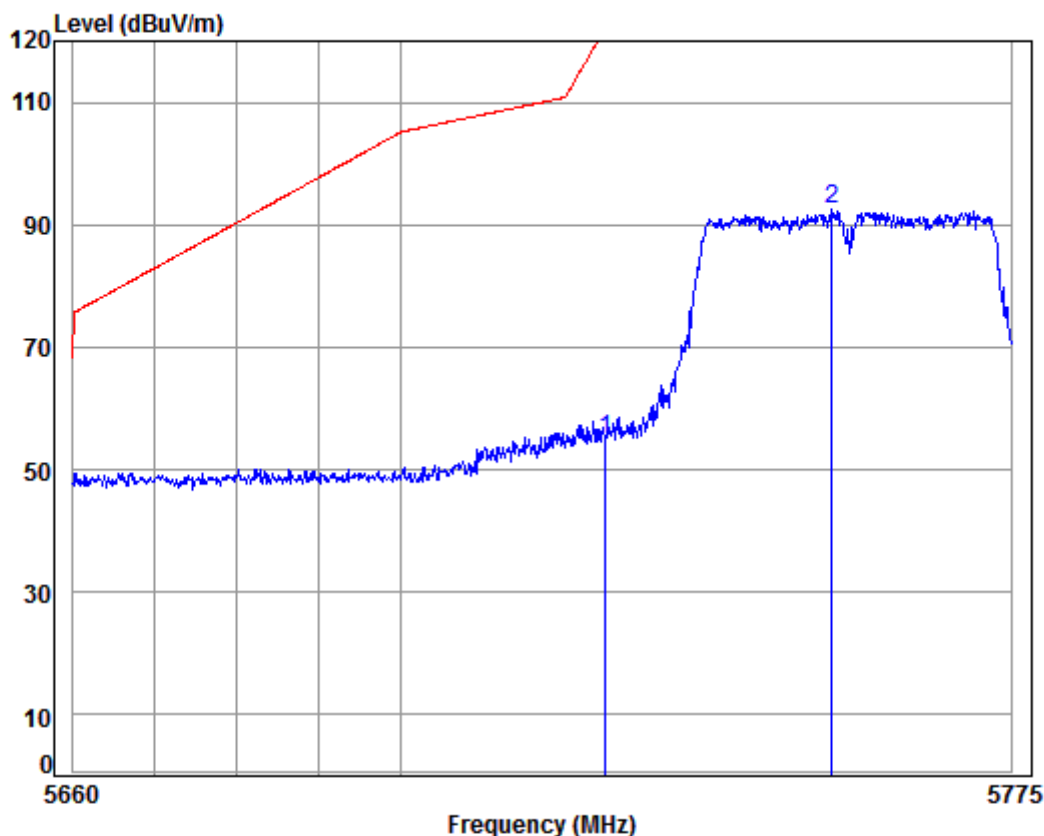
Job No: : LS9

Mode: : 5755 Bandedge

: WIFI-N40

	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	5725.000	8.48	34.54	38.35	51.75	56.42	122.20	-65.78	
2 pp	5756.329	8.51	34.56	38.35	88.35	93.07	125.20	-32.13	

Mode:d; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low



Condition: 3m VERTICAL

Job No: : LS9

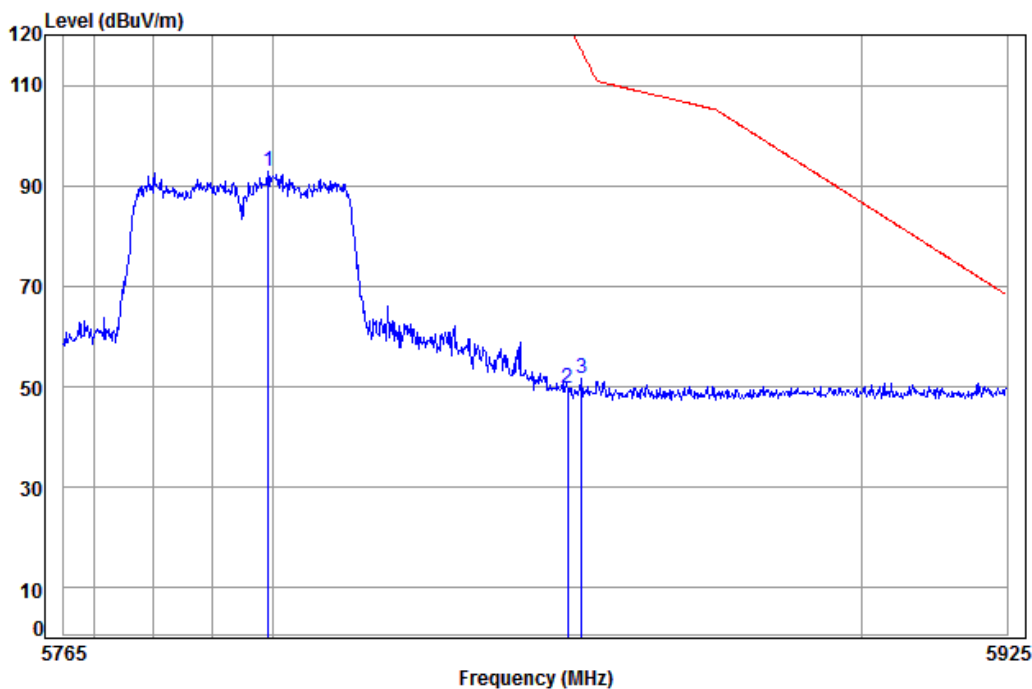
Mode: : 5755 Bandedge

: WIFI-N40

	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	5725.000	8.48	34.54	38.35	50.37	55.04	122.20	-67.16	
2 pp	5752.856	8.51	34.55	38.35	87.85	92.56	125.20	-32.64	



Mode:d; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:High



Condition: 3m HORIZONTAL

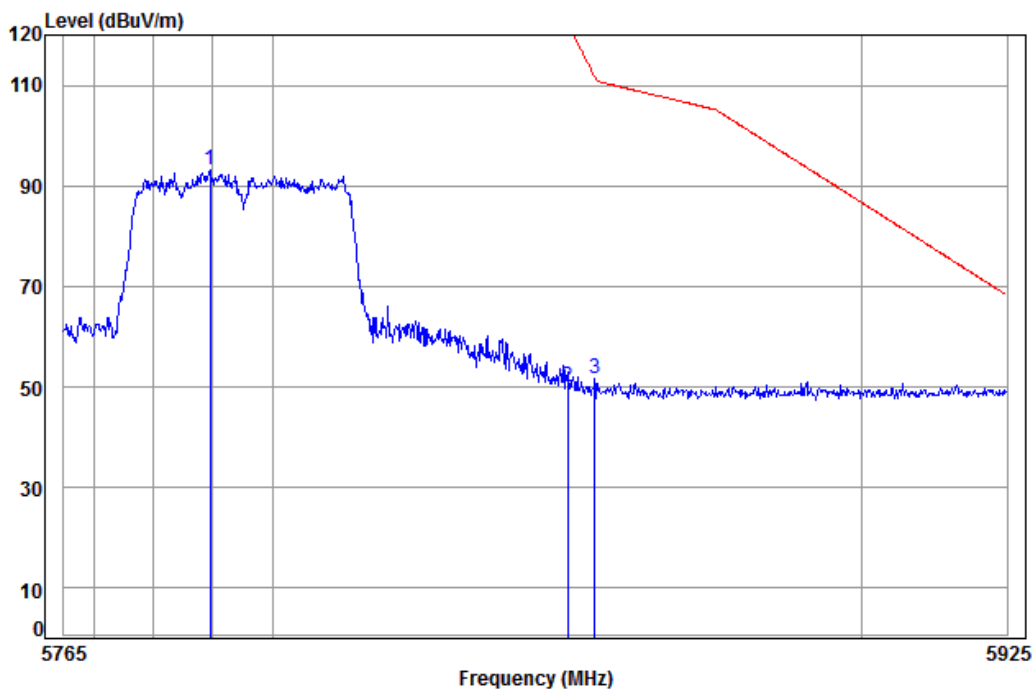
Job No: : LS9

Mode: : 5795 Bandedge

: WIFI-N40

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5799.349	8.55	34.20	38.34	88.33	92.74	125.20	-32.46
2	5850.000	8.60	34.33	38.33	45.13	49.73	122.20	-72.47
3	5852.297	8.61	34.33	38.33	46.94	51.55	116.96	-65.41

Mode:d; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:High

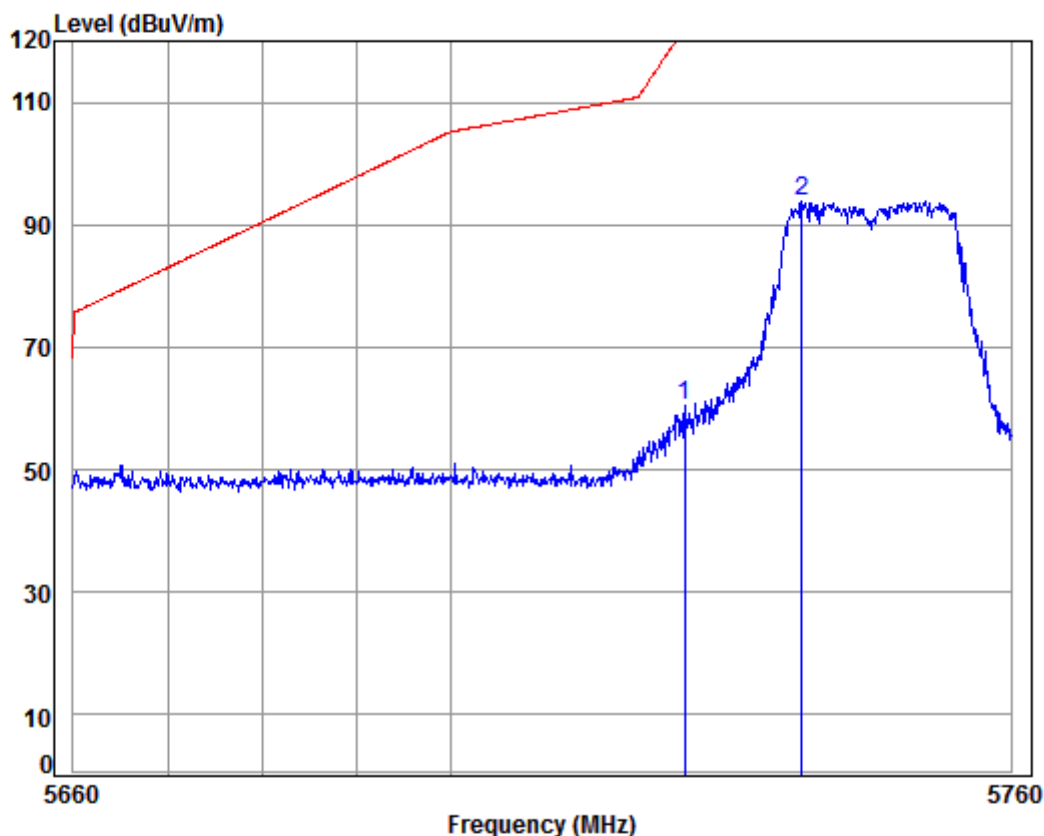


Condition: 3m VERTICAL
Job No: : LS9
Mode: : 5795 Bandedge
: WIFI-N40

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5789.514	8.54	34.21	38.34	88.75	93.16	125.20	-32.04
2	5850.000	8.60	34.33	38.33	45.57	50.17	122.20	-72.03
3	5854.541	8.61	34.34	38.33	47.12	51.74	111.85	-60.11



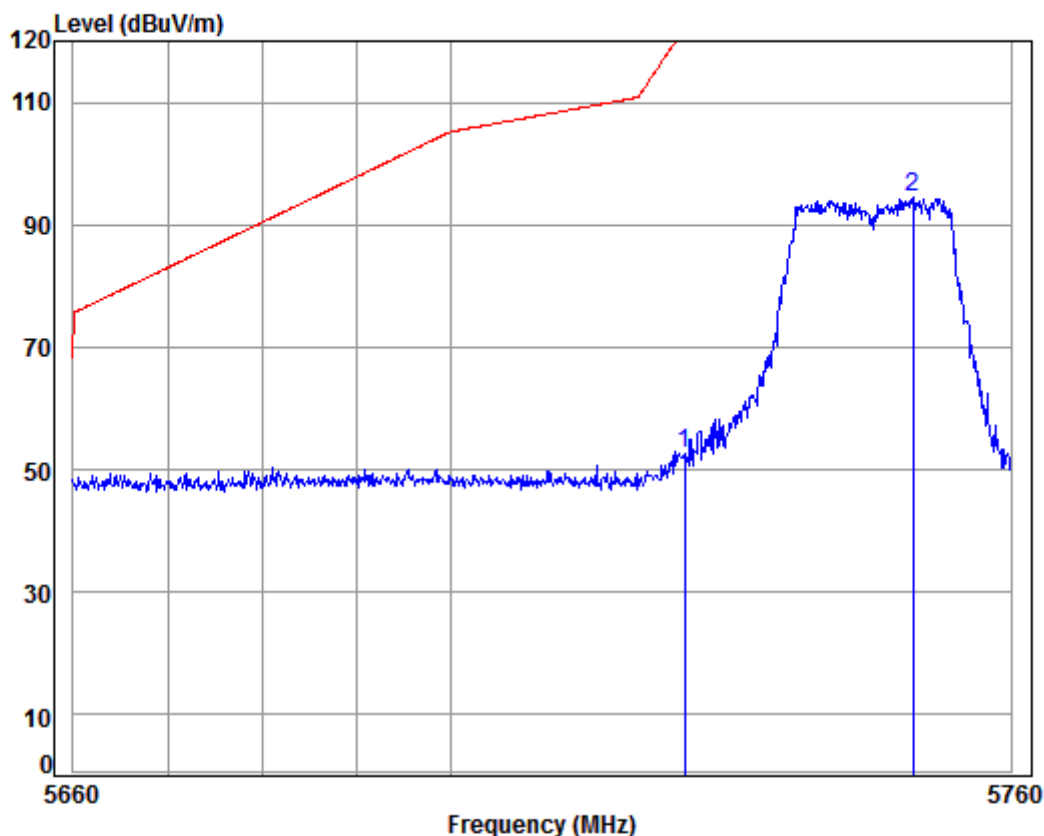
Mode:d; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:20MHz; Channel:Low



Condition: 3m HORIZONTAL
Job No: : LS9
Mode: : 5745 Bandedge
: WIFI-AC20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	38.35	55.91	60.58	122.20	-61.62	
2	5737.548	8.49	34.55	38.35	89.20	93.89	125.20	-31.31	pp

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



Condition: 3m VERTICAL

Job No: : LS9

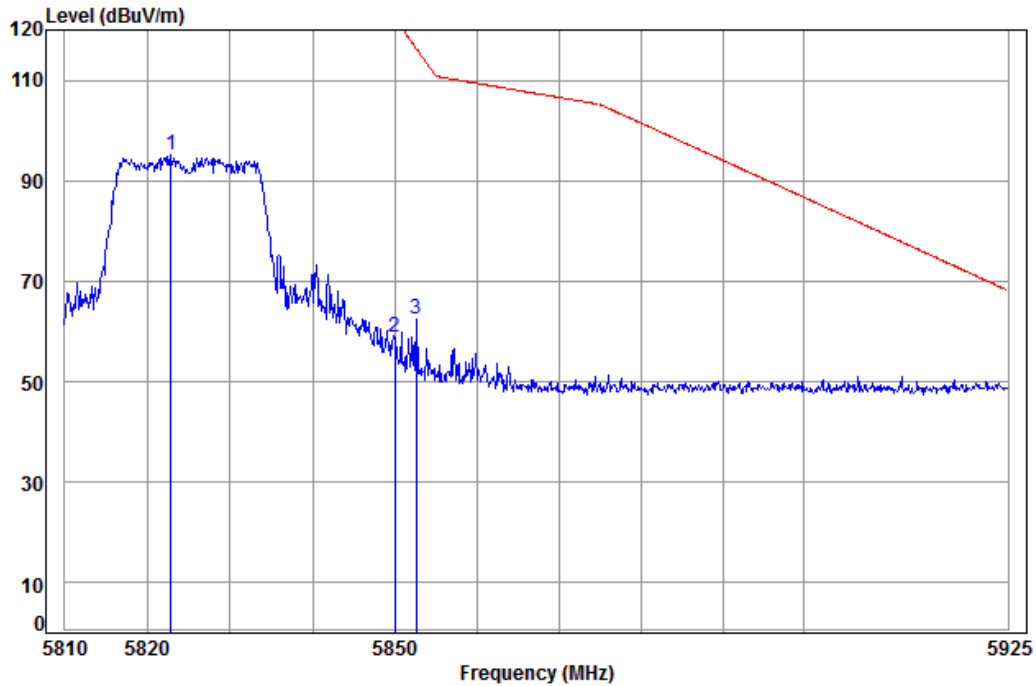
Mode: : 5745 Bandedge

: WIFI-AC20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	38.35	47.93	52.60	122.20	-69.60	
2	5749.518	8.50	34.55	38.35	89.64	94.34	125.20	-30.86	



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



Condition: 3m HORIZONTAL

Job No: : LS9

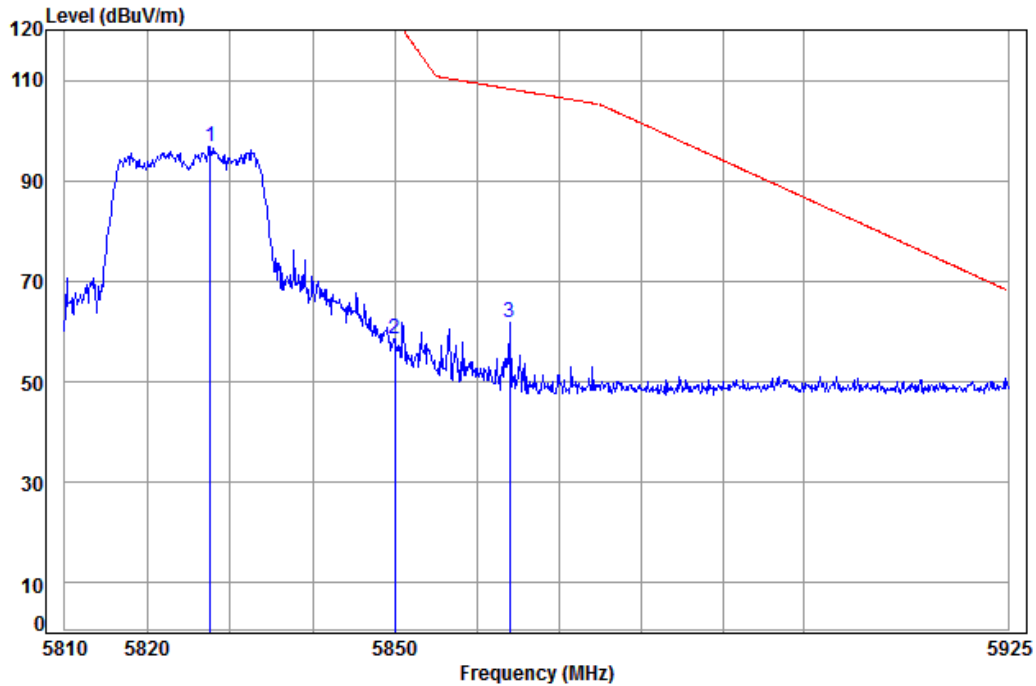
Mode: : 5825 Bandedge

: WIFI-AC20

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5822.882	8.58	34.26	38.34	90.51	95.01	125.20	-30.19
2	5850.000	8.60	34.33	38.33	54.27	58.87	122.20	-63.33
3	5852.632	8.61	34.33	38.33	57.69	62.30	116.20	-53.90



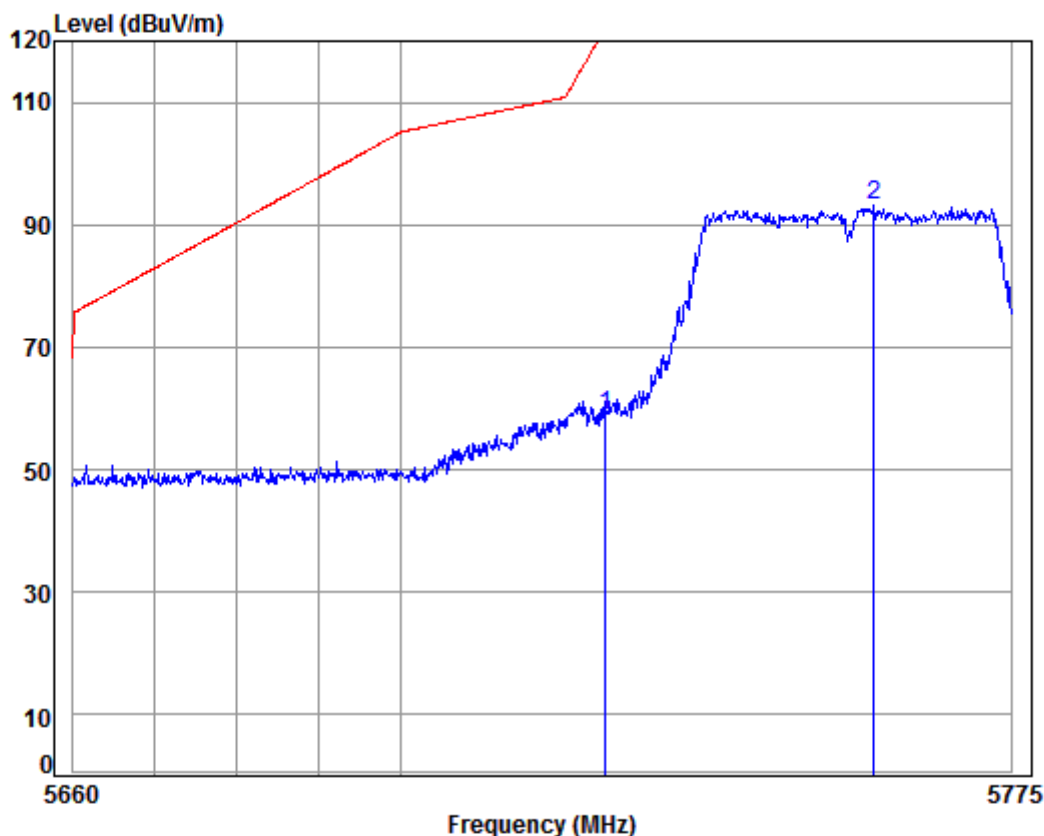
Mode:d; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:20MHz; Channel:High



Condition: 3m VERTICAL
Job No: : LS9
Mode: : 5825 Bandedge
: WIFI-AC20

	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	5827.563	8.58	34.27	38.33	92.18	96.70	125.20	-28.50	
2	5850.000	8.60	34.33	38.33	53.98	58.58	122.20	-63.62	
3	5863.999	8.62	34.36	38.33	57.10	61.75	108.28	-46.53	

Mode:d; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low



Condition: 3m HORIZONTAL

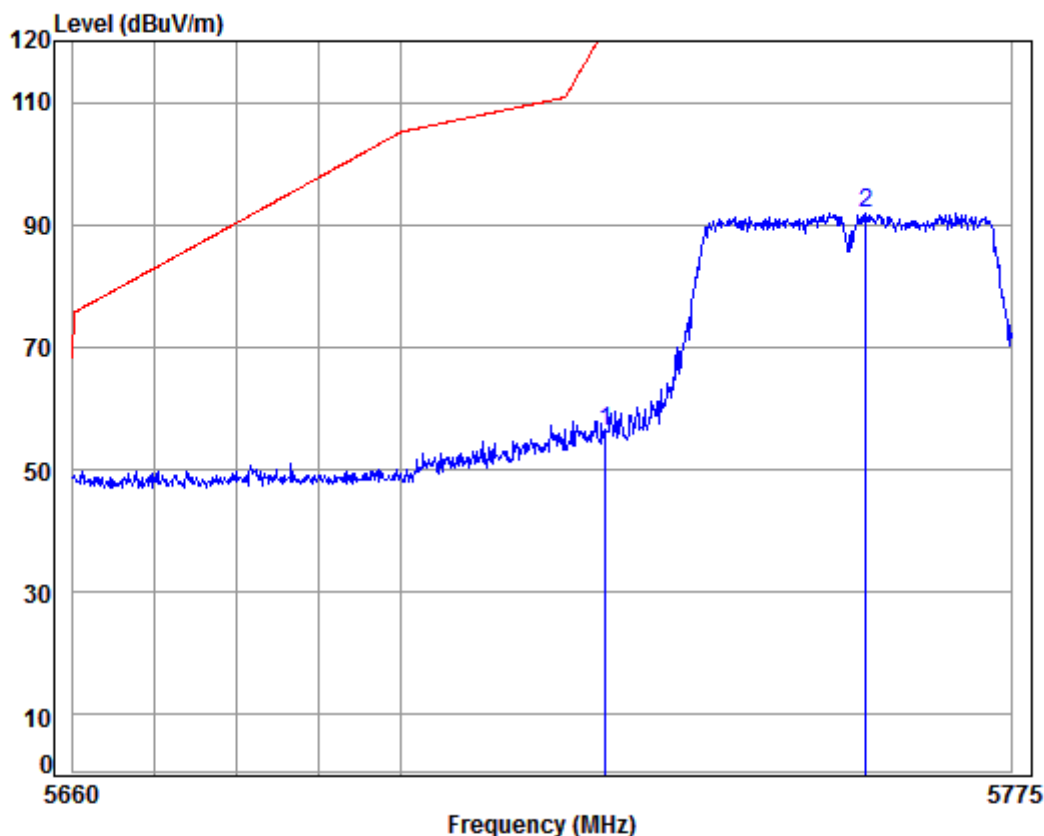
Job No: : LS9

Mode: : 5755 Bandedge

: WIFI-AC40

	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	5725.000	8.48	34.54	38.35	54.20	58.87	122.20	-63.33	
2 pp	5758.065	8.51	34.56	38.35	88.55	93.27	125.20	-31.93	

Mode:d; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low



Condition: 3m VERTICAL

Job No: : LS9

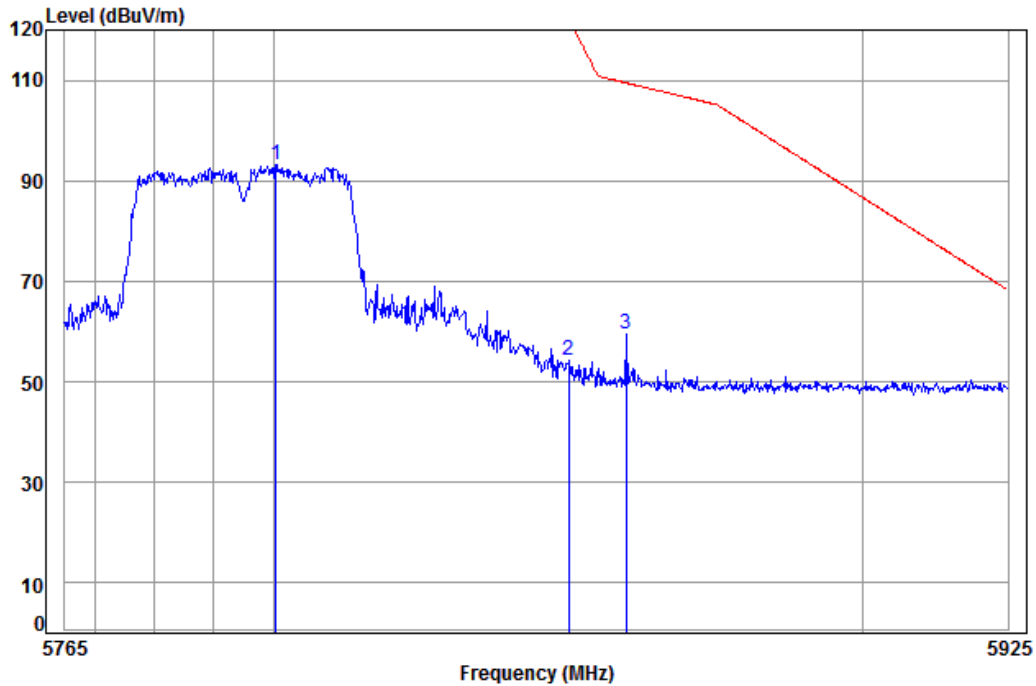
Mode: : 5755 Bandedge

: WIFI-AC40

	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	5725.000	8.48	34.54	38.35	51.45	56.12	122.20	-66.08	
2 pp	5757.023	8.51	34.56	38.35	87.14	91.86	125.20	-33.34	



Mode:d; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High



Condition: 3m HORIZONTAL

Job No: : LS9

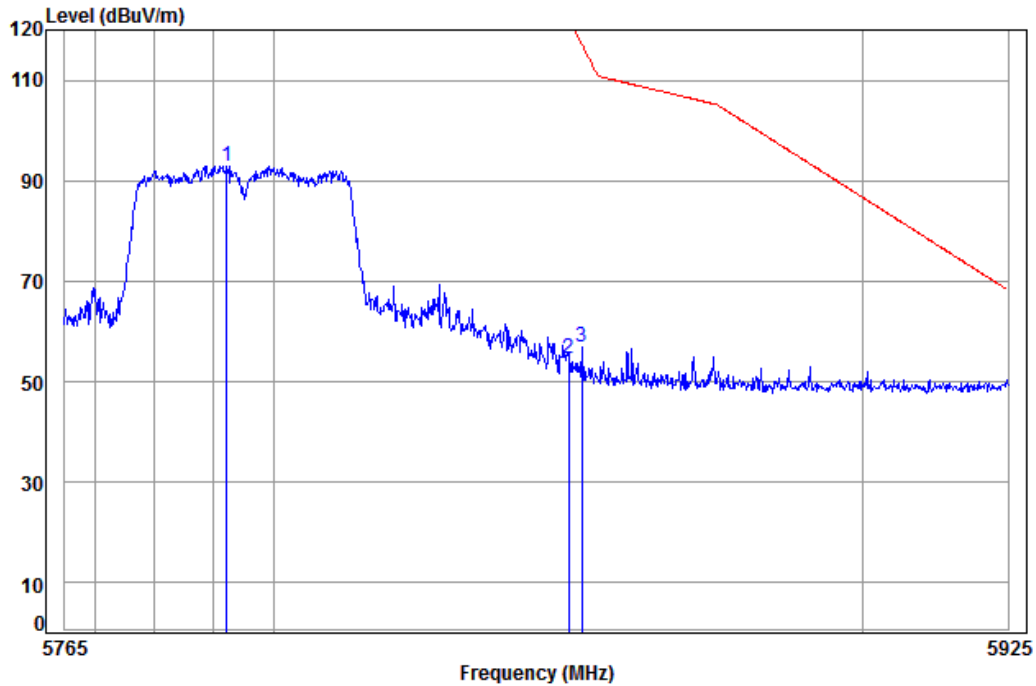
Mode: : 5795 Bandedge

: WIFI-AC40

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5800.460	8.56	34.20	38.34	88.88	93.30	125.20	-31.90
2	5850.000	8.60	34.33	38.33	49.79	54.39	122.20	-67.81
3	5859.672	8.61	34.35	38.33	54.76	59.39	109.49	-50.10



Mode:d; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High

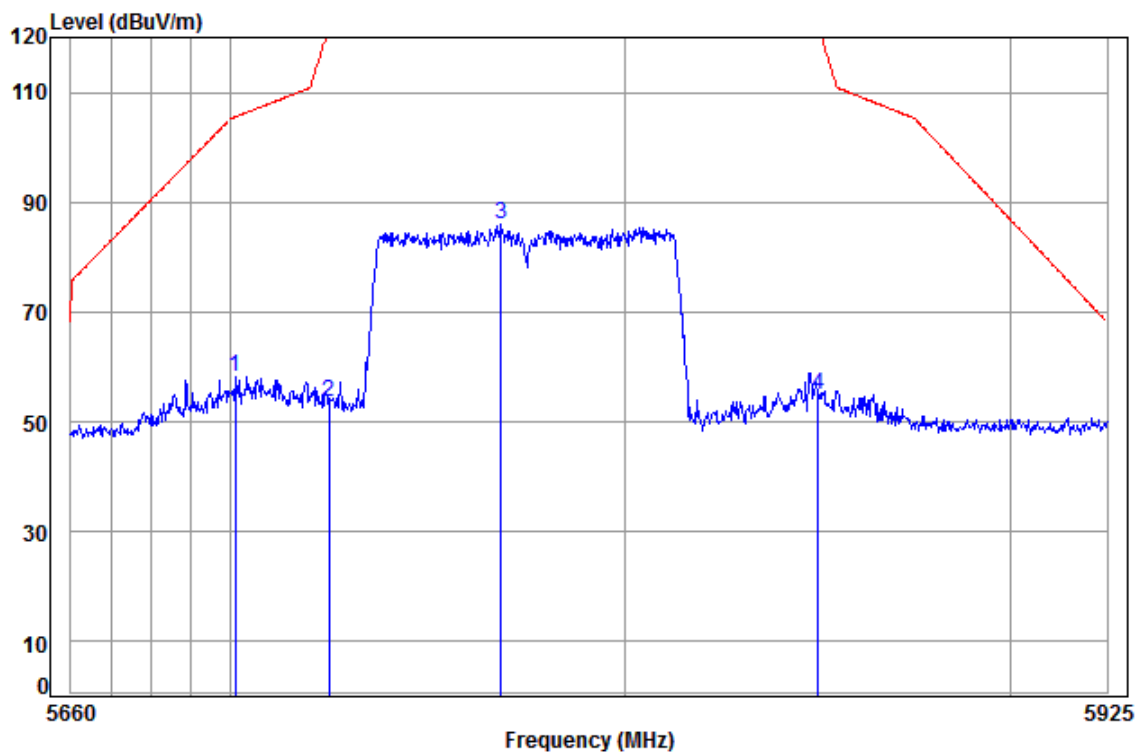


Condition: 3m VERTICAL
Job No: : LS9
Mode: : 5795 Bandedge
: WIFI-AC40

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5792.209	8.55	34.20	38.34	88.47	92.88	125.20	-32.32
2	5850.000	8.60	34.33	38.33	49.94	54.54	122.20	-67.66
3	5852.137	8.61	34.33	38.33	52.18	56.79	117.33	-60.54



Mode:d; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:80MHz;



Condition: 3m HORIZONTAL

Job No: : LS9

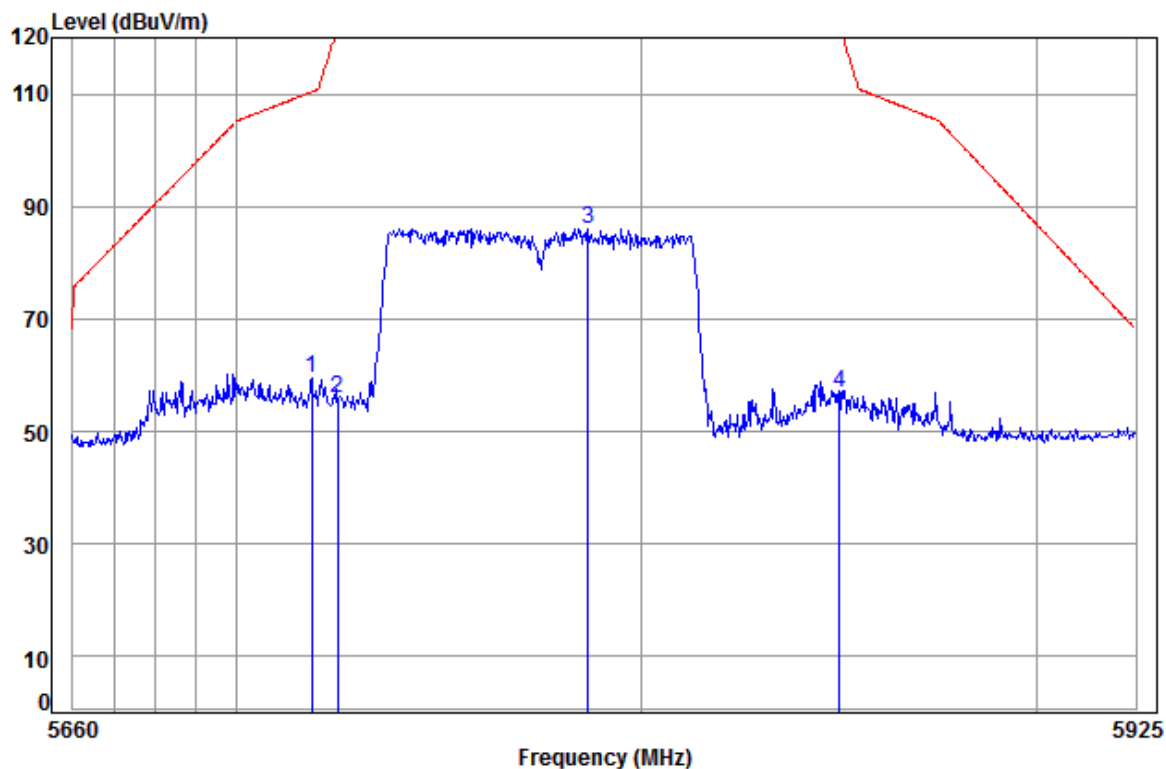
Mode: : 5775 Bandedge

: WIFI-AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5701.329	8.46	34.25	38.36	53.87	58.22	105.57	-47.35	
2	5725.000	8.48	34.24	38.35	49.33	53.70	122.20	-68.50	
3	5768.505	8.52	34.22	38.35	81.57	85.96	125.20	-39.24	pp
4	5850.000	8.60	34.33	38.33	50.36	54.96	122.20	-67.24	



Mode:d; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:80MHz;

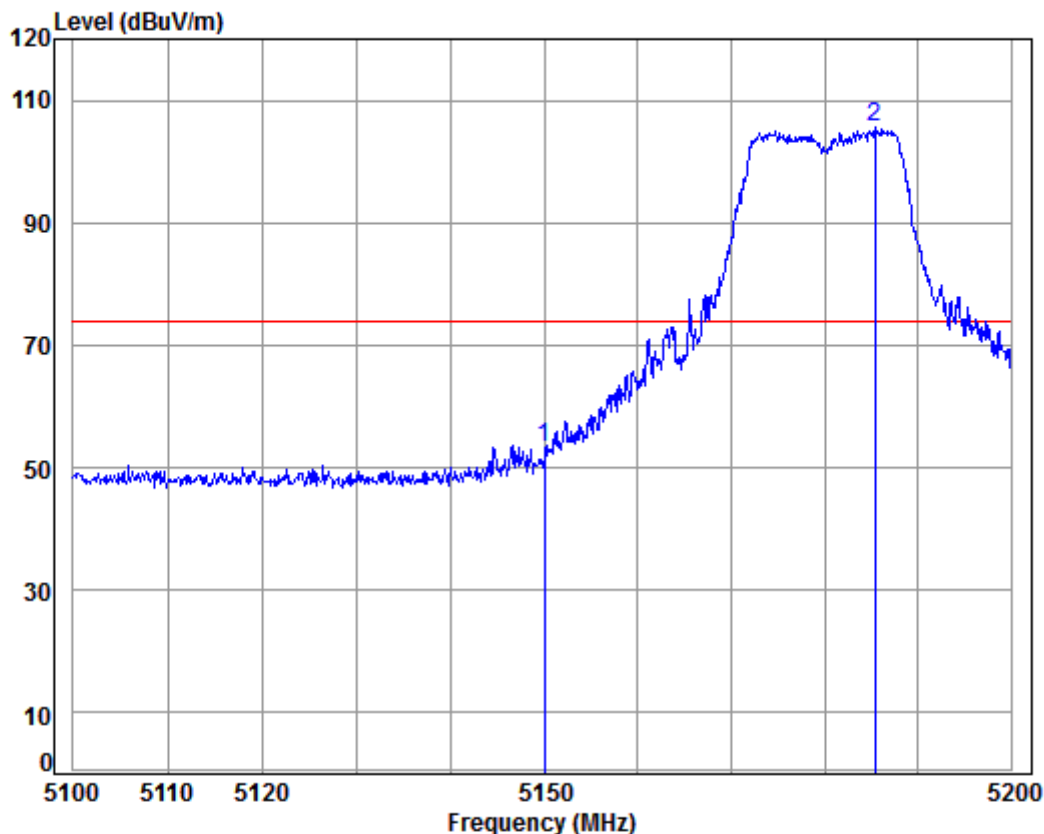


Condition: 3m VERTICAL
Job No: : LS9
Mode: : 5775 Bandedge
: WIFI-AC80

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5718.572	8.47	34.24	38.36	55.30	59.65	110.40	-50.75	
2	5725.000	8.48	34.24	38.35	51.63	56.00	122.20	-66.20	
3 pp	5787.011	8.54	34.21	38.34	81.71	86.12	125.20	-39.08	
4	5850.000	8.60	34.33	38.33	52.21	56.81	122.20	-65.39	



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

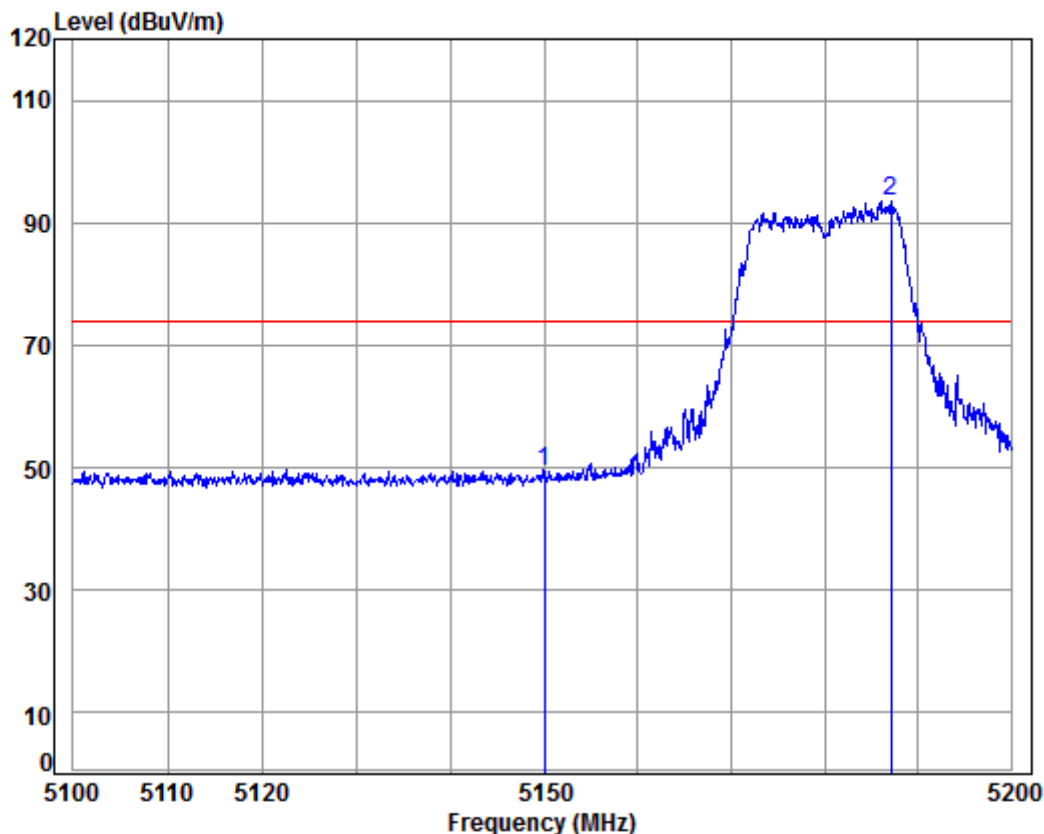


Condition: 3m Horizontal
Job No: : CDT
Mode: : 5180 Bandedge
: A20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5150.000	8.08	34.47	38.47	49.09	53.17	74.00	-20.83	
2	pp 5185.379	8.10	34.46	38.46	101.49	105.59	74.00	31.59	



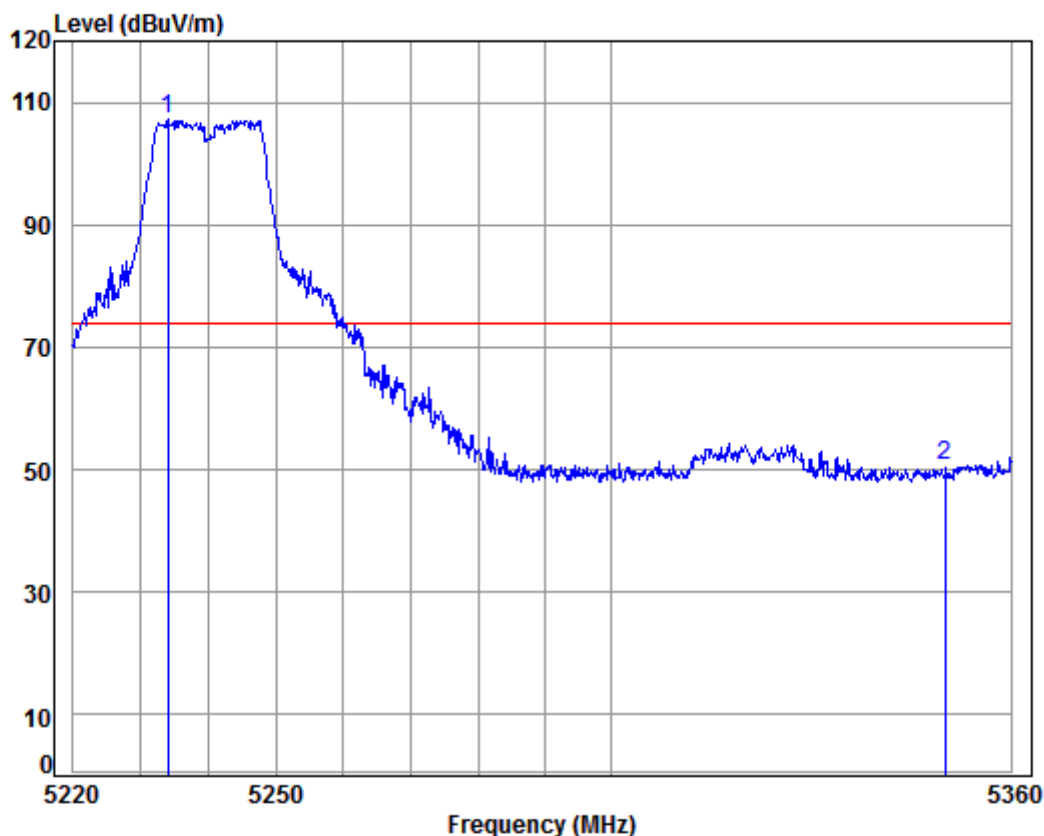
Mode:f; Polarization:Vertical; Modulation Type:802.11a; bandwidth:20MHz; Channel:Low



Condition: 3m Vertical
Job No: : CDT
Mode: : 5180 Bandedge
: A20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5150.000	8.08	34.47	38.47	45.33	49.41	74.00	-24.59	
2	pp 5187.091	8.10	34.46	38.46	89.37	93.47	74.00	19.47	

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



Condition: 3m Horizontal

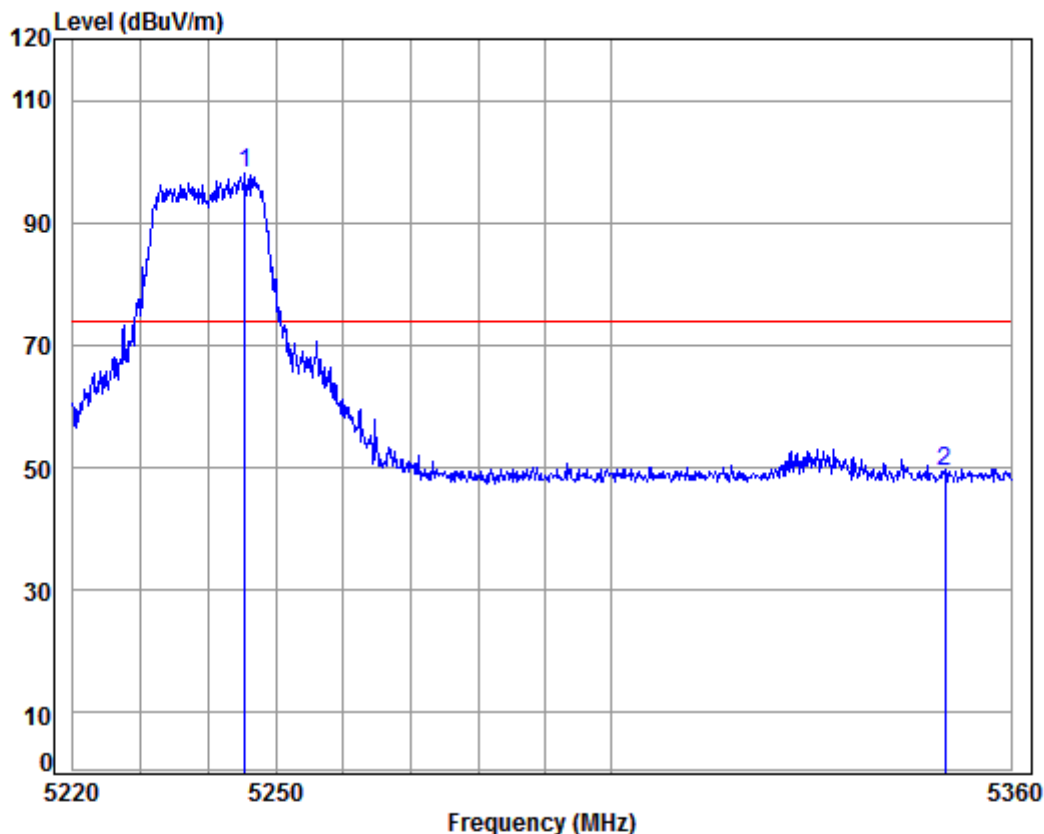
Job No: : CDT

Mode: : 5240 Bandedge

: A20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5233.972	8.12	34.45	38.45	103.18	107.30	74.00	33.30	
2	5350.000	8.18	34.43	38.43	46.55	50.73	74.00	-23.27	

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



Condition: 3m Vertical

Job No: : CDT

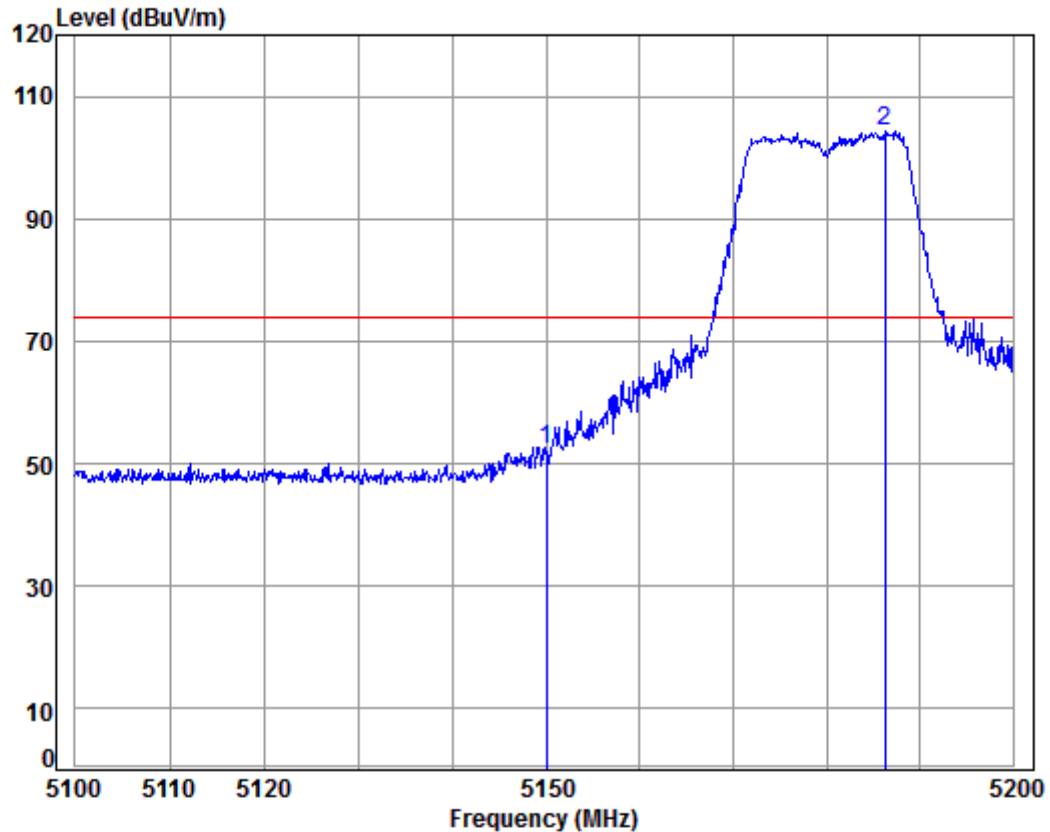
Mode: : 5240 Bandedge

: A20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5245.344	8.13	34.45	38.45	93.82	97.95	74.00	23.95	
2	5350.000	8.18	34.43	38.43	45.23	49.41	74.00	-24.59	



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

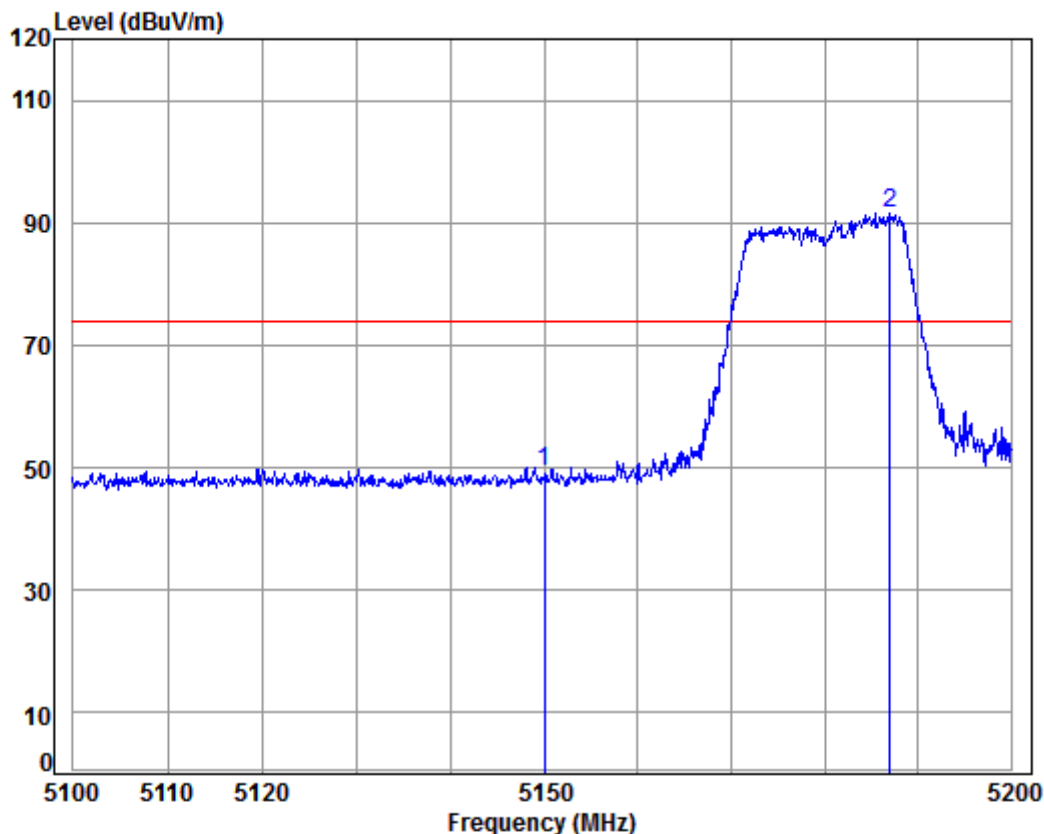


Condition: 3m Horizontal
Job No: : CDT
Mode: : 5180 Bandedge
: N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5150.000	8.08	34.47	38.47	48.34	52.42	74.00	-21.58	
2	pp 5186.286	8.10	34.46	38.46	100.17	104.27	74.00	30.27	



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

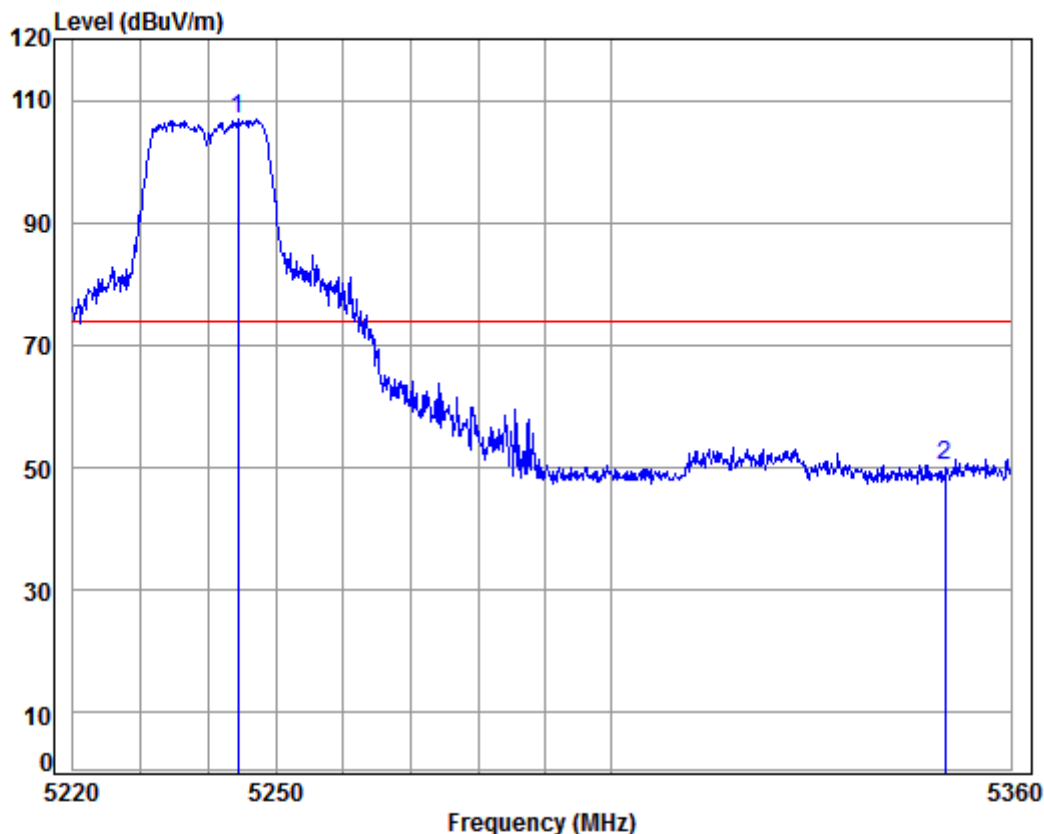


Condition: 3m Vertical
Job No: : CDT
Mode: : 5180 Bandedge
: N20

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5150.000	8.08	34.47	38.47	45.32	49.40	74.00	-24.60	
2 pp	5186.991	8.10	34.46	38.46	87.51	91.61	74.00	17.61	



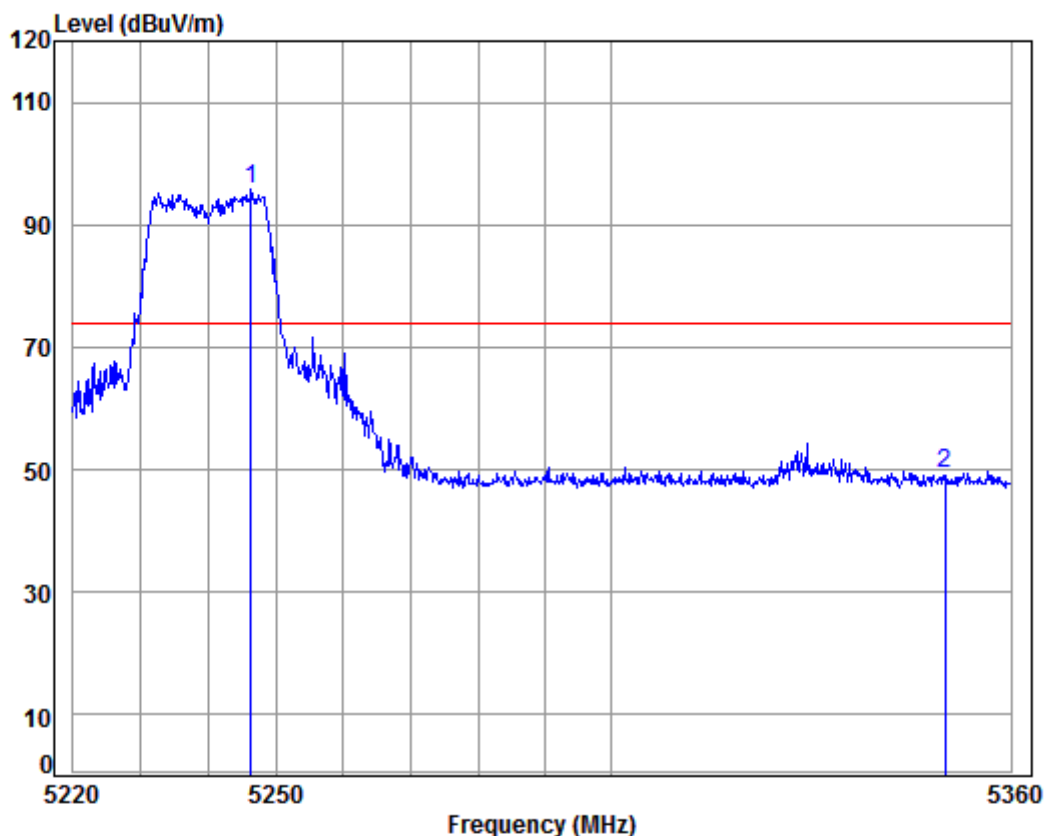
Mode:f; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m Horizontal
Job No: : CDT
Mode: : 5240 Band edge
: N20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5244.372	8.13	34.45	39.07	103.28	106.79	74.00	32.79	
2	5350.000	8.18	34.43	39.06	46.83	50.38	74.00	-23.62	

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



Condition: 3m Vertical

Job No: : CDT

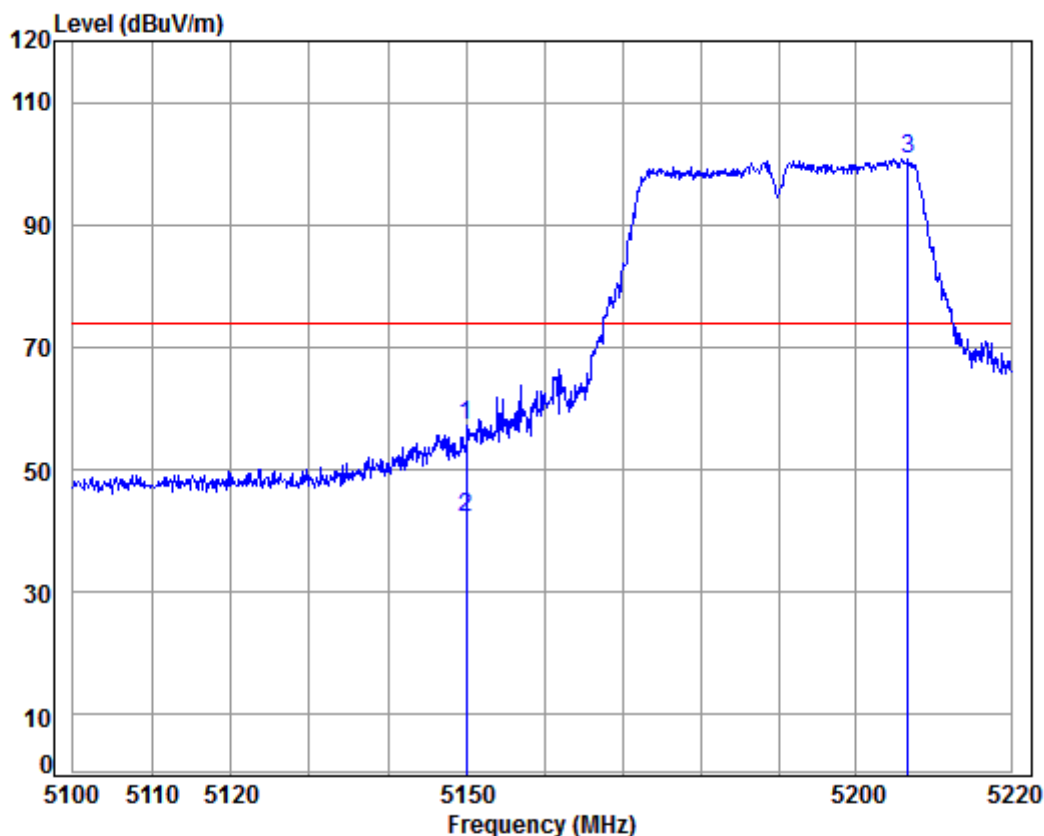
Mode: : 5240 Band edge

: N20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5246.315	8.13	34.45	39.07	92.17	95.68	74.00	21.68	
2	5350.000	8.18	34.43	39.06	45.88	49.43	74.00	-24.57	



Mode:f; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low



Condition: 3m Horizontal

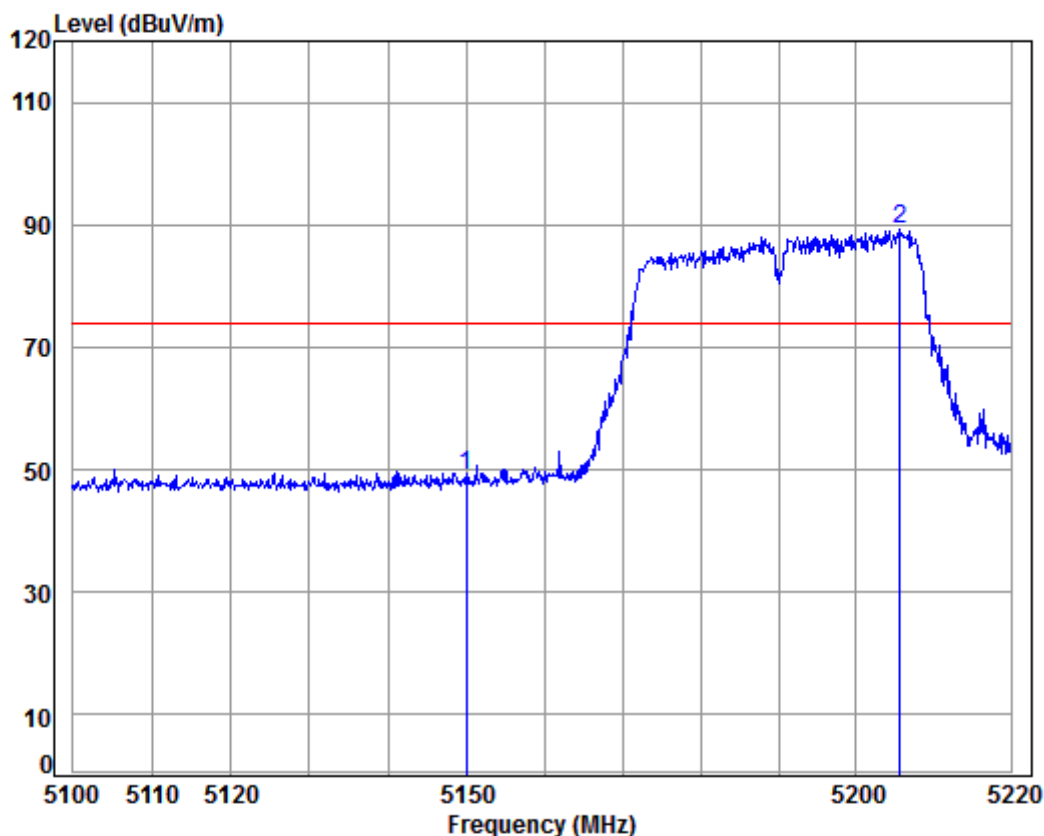
Job No: : CDT

Mode: : 5190 Bandedge

: N40

	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	5150.000	8.08	34.47	38.47	53.03	57.11	74.00	-16.89	
2	av 5150.000	8.08	34.47	38.47	38.08	42.16	54.00	-11.84	Average
3	pp 5206.663	8.11	34.46	38.46	96.65	100.76	74.00	26.76	

Mode:f; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low



Condition: 3m Vertical

Job No: : CDT

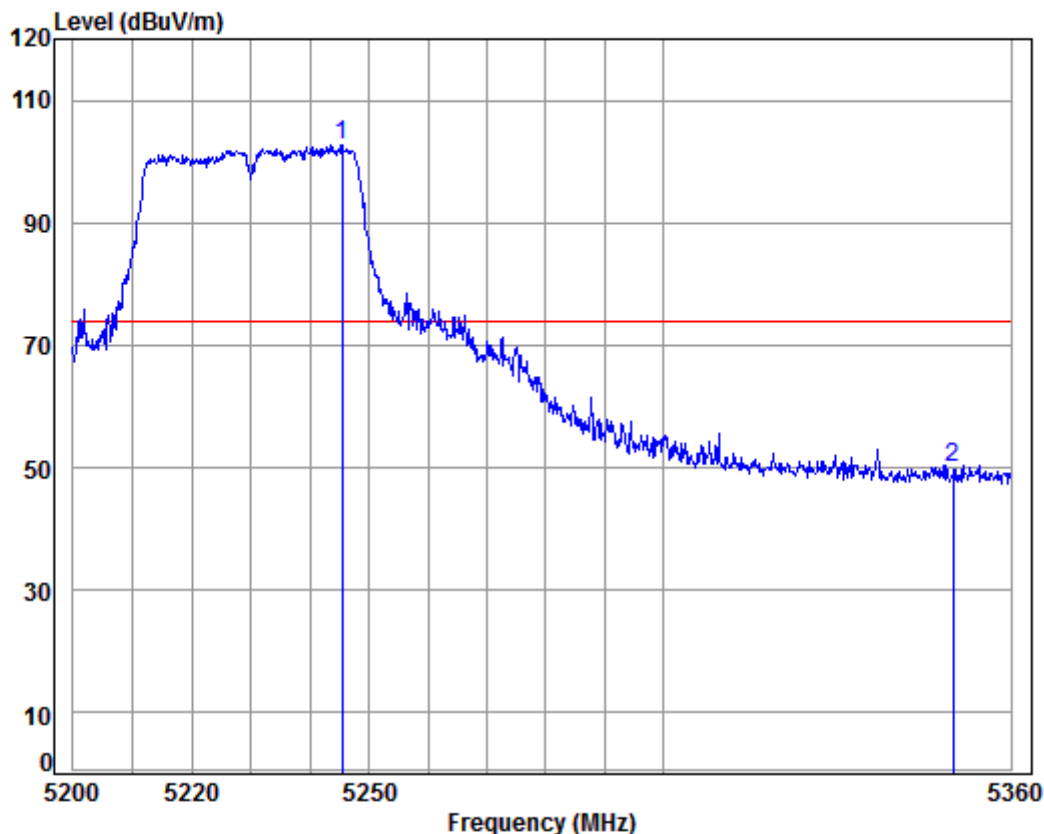
Mode: : 5190 Bandedge

: N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5150.000	8.08	34.47	38.47	44.83	48.91	74.00	-25.09	
2	5205.694	8.11	34.46	38.46	85.00	89.11	74.00	15.11	pp



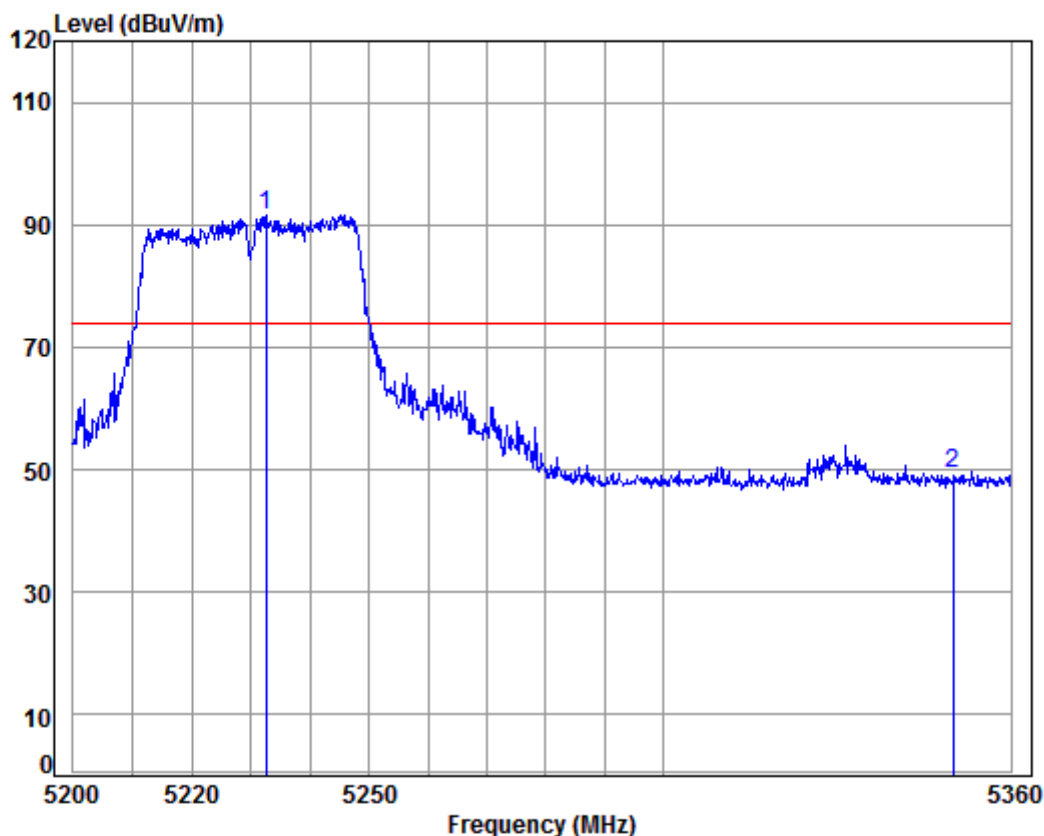
Mode:f; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:High



Condition: 3m Horizontal
Job No: : CDT
Mode: : 5230 Band edge
: N40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5245.425	8.13	34.45	39.07	99.21	102.72	74.00	28.72	
2	5350.000	8.18	34.43	39.06	46.33	49.88	74.00	-24.12	

Mode:f; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:High



Condition: 3m Vertical

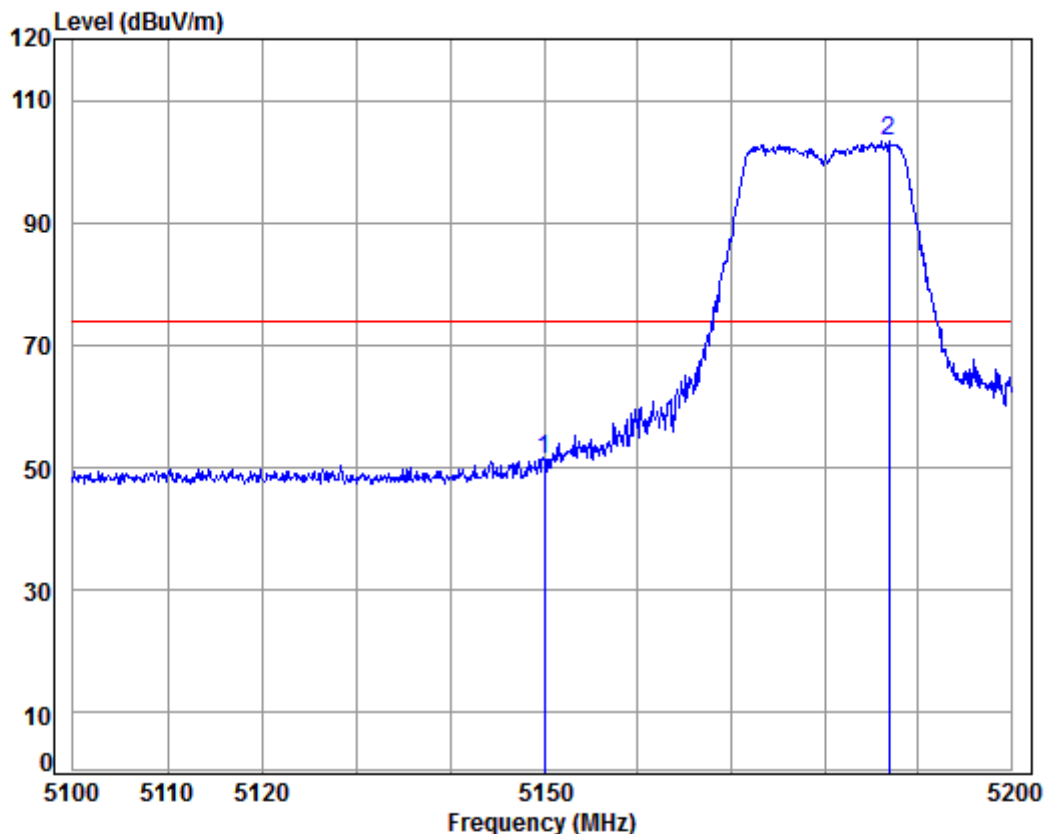
Job No: : CDT

Mode: : 5230 Band edge

: N40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5232.564	8.12	34.45	39.08	88.20	91.69	74.00	17.69	
2	5350.000	8.18	34.43	39.06	45.79	49.34	74.00	-24.66	

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

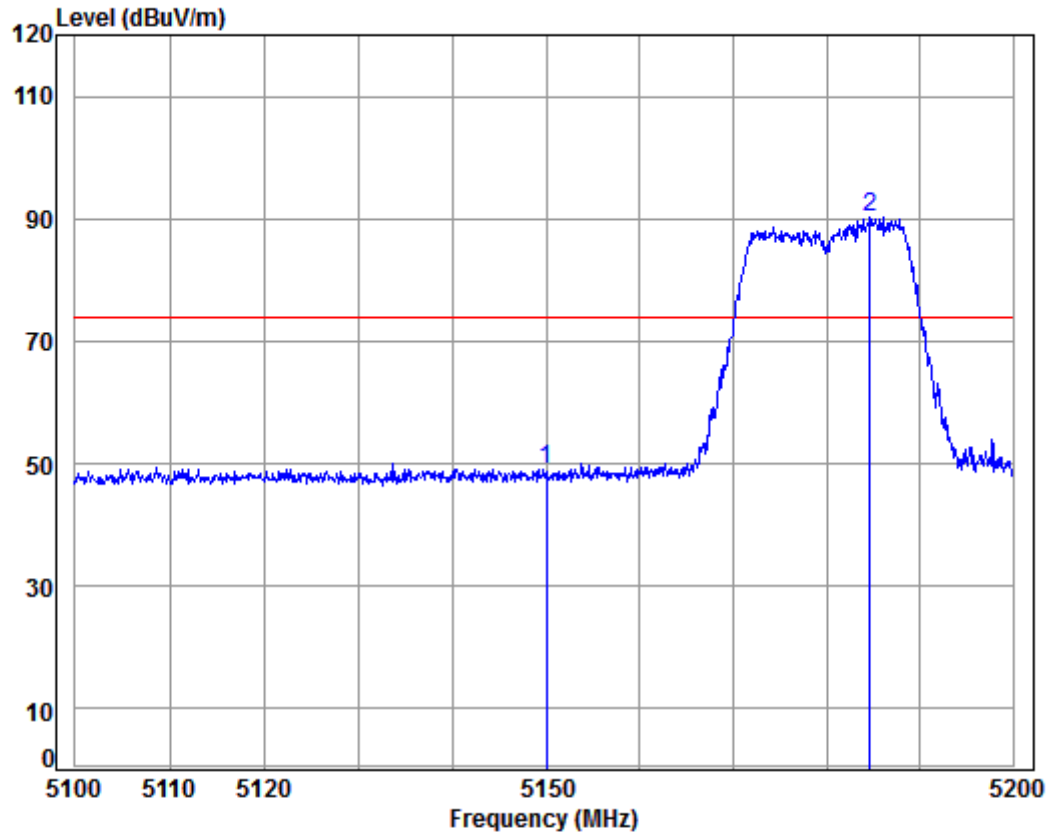


Condition: 3m Horizontal
Job No: : CDT
Mode: : 5180 Bandedge
: AC20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5150.000	8.08	34.47	38.47	47.29	51.37	74.00	-22.63	
2	pp 5186.890	8.10	34.46	38.46	99.33	103.43	74.00	29.43	



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



Condition: 3m Vertical

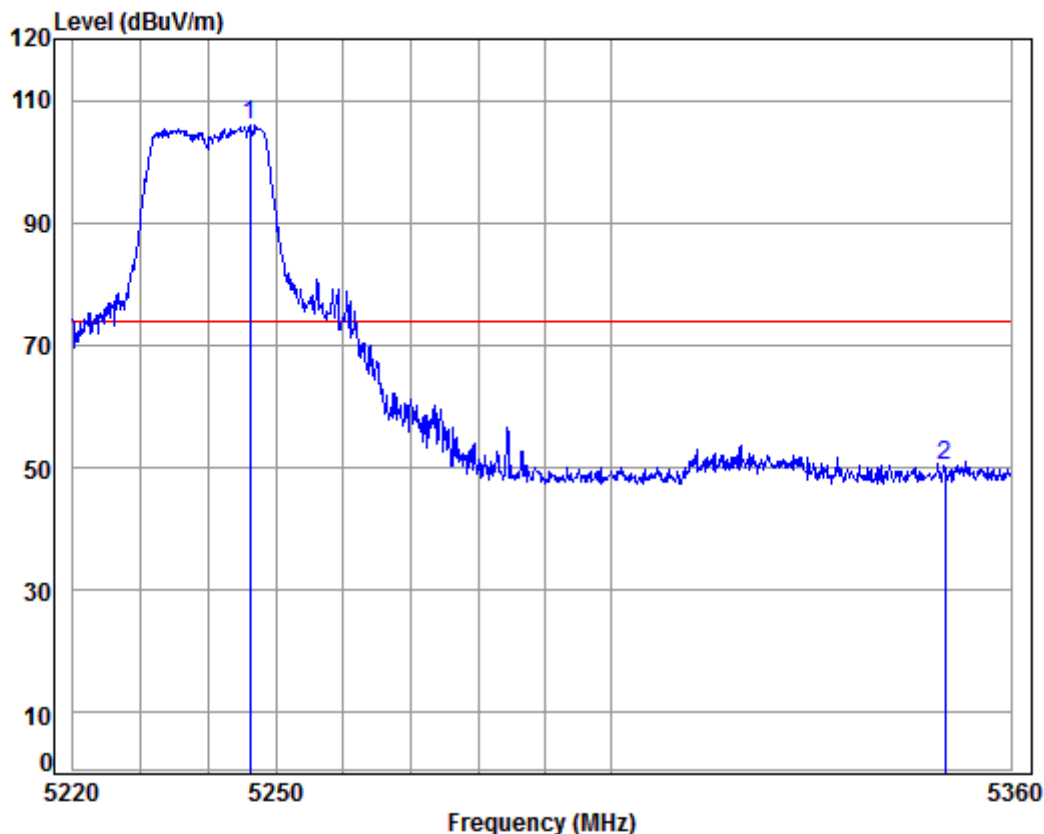
Job No: : CDT

Mode: : 5180 Bandedge

: AC20

	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	5150.000	8.08	34.47	38.47	45.12	49.20	74.00	-24.80	
2	pp 5184.675	8.10	34.46	38.46	86.12	90.22	74.00	16.22	

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



Condition: 3m Horizontal

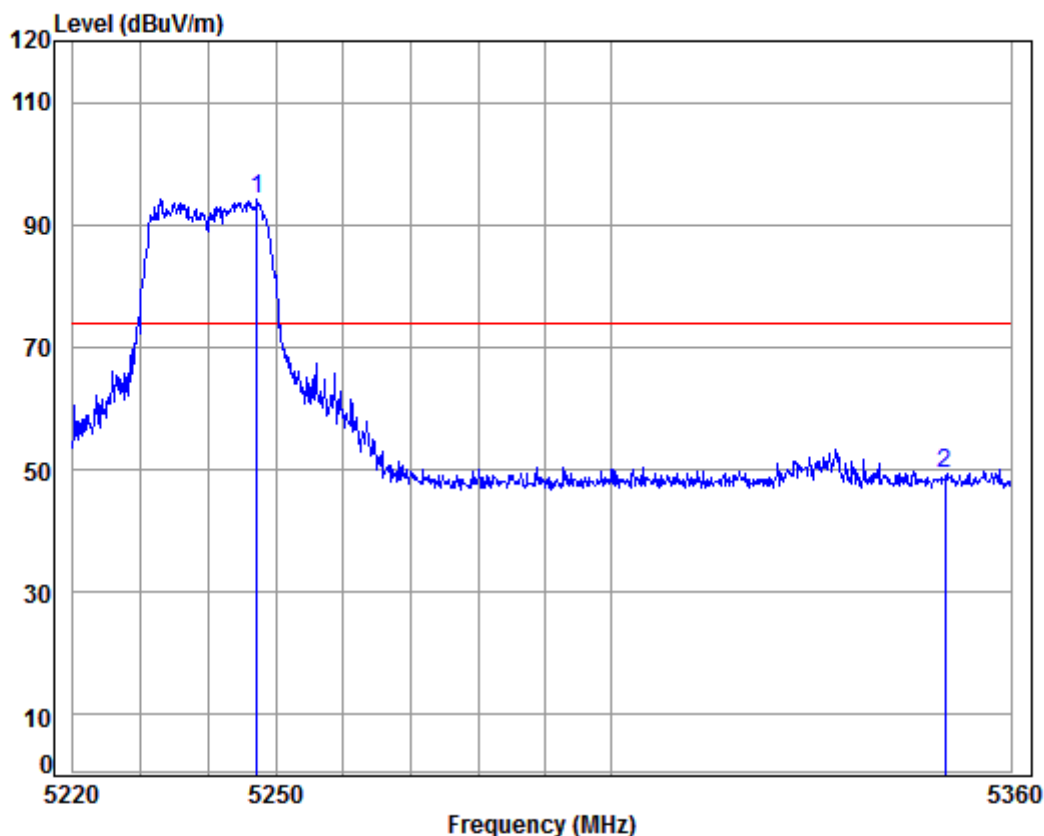
Job No: : CDT

Mode: : 5240 Band edge

: AC20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5246.177	8.13	34.45	39.07	102.32	105.83	74.00	31.83	
2	5350.000	8.18	34.43	39.06	46.66	50.21	74.00	-23.79	

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



Condition: 3m Vertical

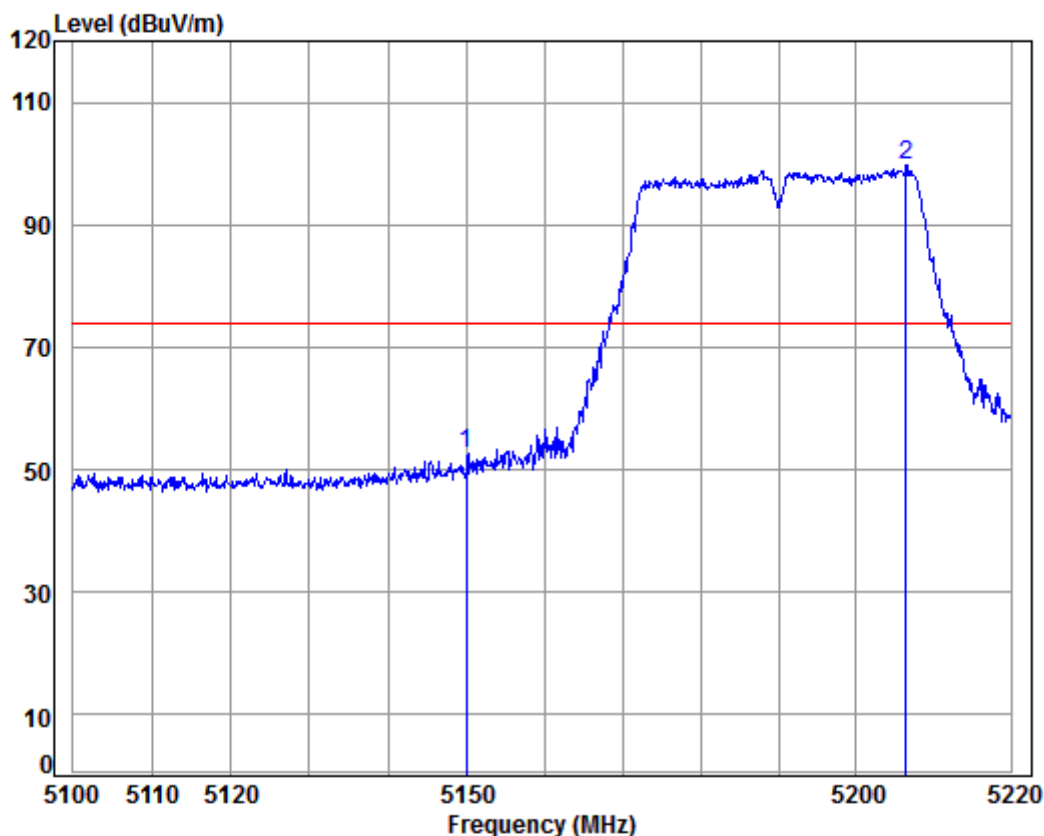
Job No: : CDT

Mode: : 5240 Band edge

: AC20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5247.149	8.13	34.45	39.07	90.77	94.28	74.00	20.28	
2	5350.000	8.18	34.43	39.06	45.77	49.32	74.00	-24.68	

Mode:f; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low



Condition: 3m Horizontal

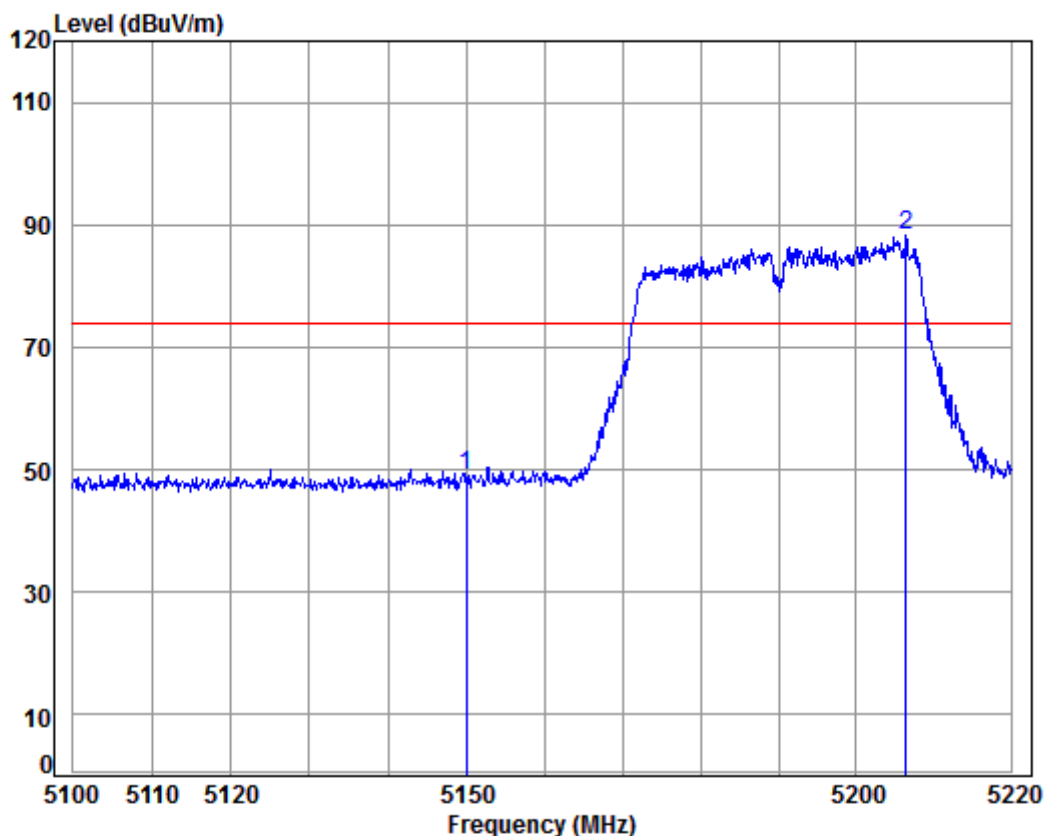
Job No: : CDT

Mode: : 5190 Bandedge

: AC40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5150.000	8.08	34.47	38.47	48.42	52.50	74.00	-21.50	
2 pp	5206.421	8.11	34.46	38.46	95.57	99.68	74.00	25.68	

Mode:f; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low



Condition: 3m Vertical

Job No: : CDT

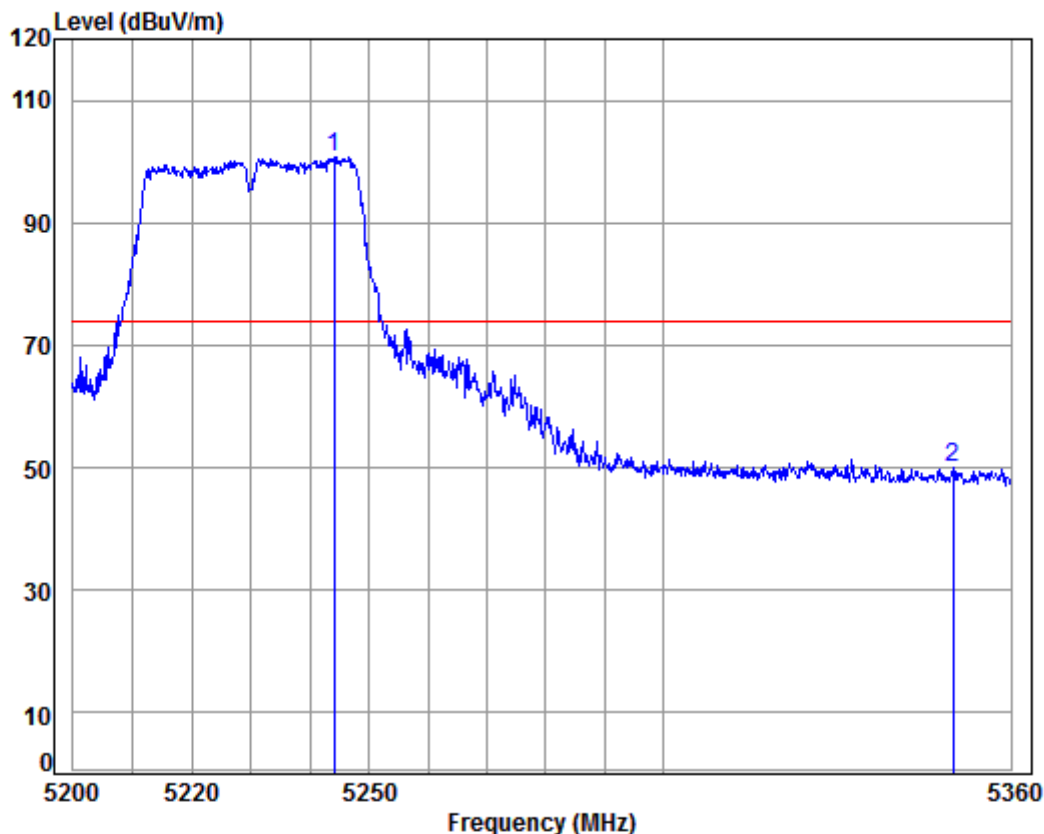
Mode: : 5190 Bandedge

: AC40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5150.000	8.08	34.47	38.47	44.98	49.06	74.00	-24.94	
2	pp 5206.421	8.11	34.46	38.46	84.32	88.43	74.00	14.43	



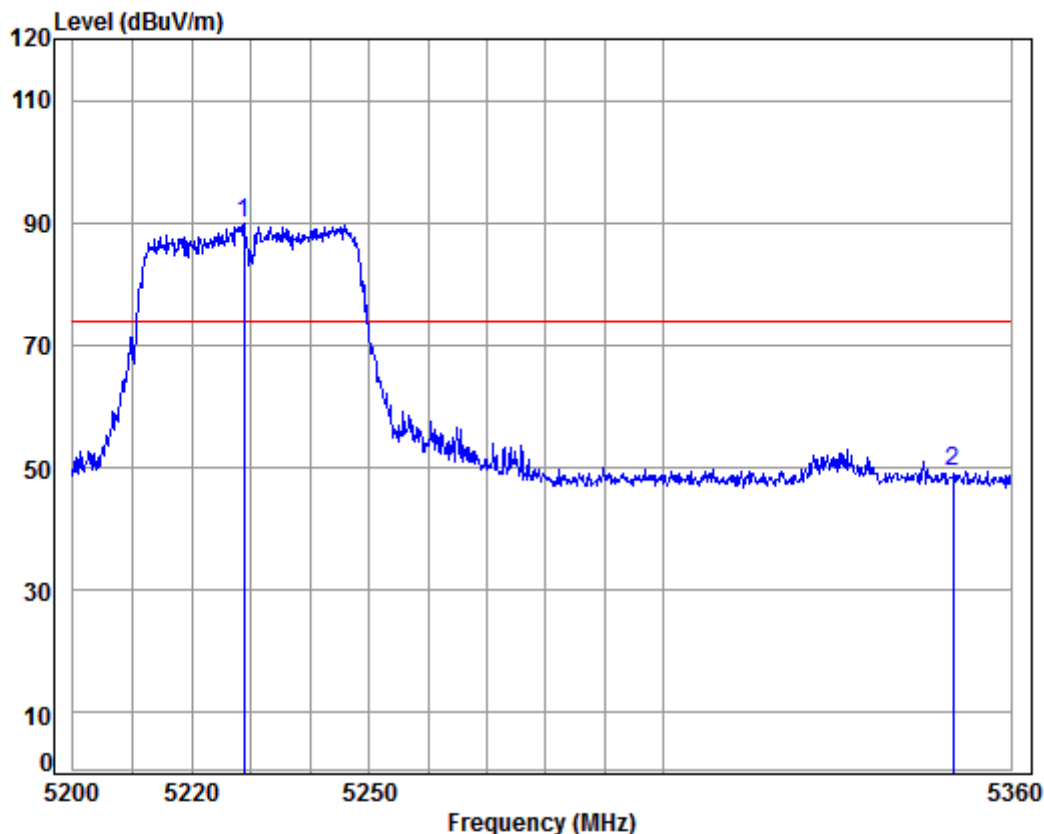
Mode:f; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High



Condition: 3m Horizontal
Job No: : CDT
Mode: : 5230 Band edge
: AC40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5243.995	8.12	34.45	39.07	97.33	100.83	74.00	26.83	
2	5350.000	8.18	34.43	39.06	46.33	49.88	74.00	-24.12	

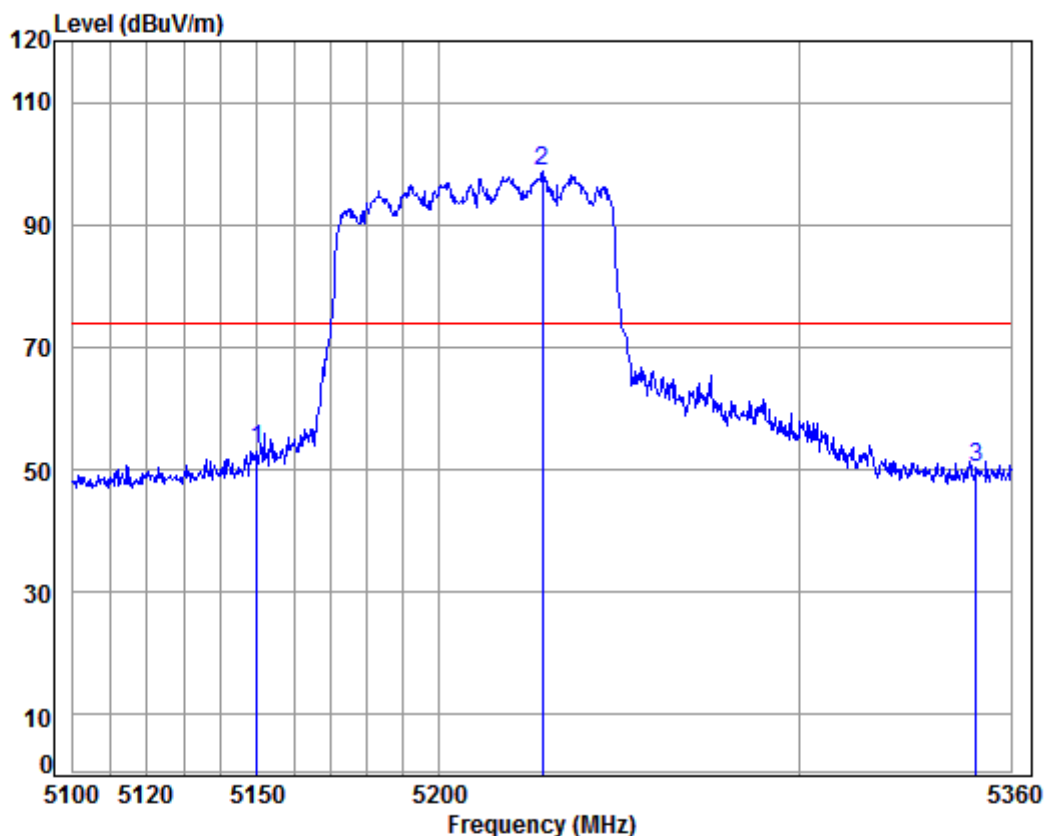
Mode:f; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High



Condition: 3m Vertical
Job No: : CDT
Mode: : 5230 Band edge
: AC40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5228.760	8.12	34.45	39.08	86.31	89.80	74.00	15.80	
2	5350.000	8.18	34.43	39.06	45.72	49.27	74.00	-24.73	

Mode:f; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:80MHz;



Condition: 3m Horizontal

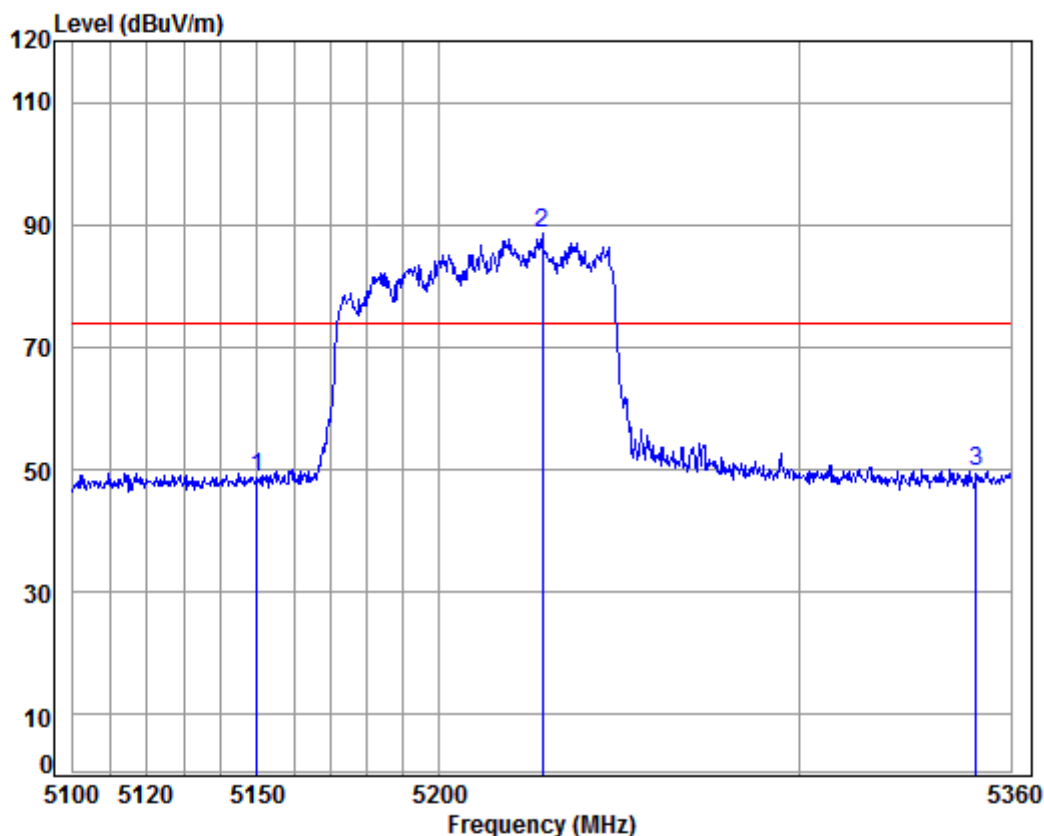
Job No: : CDT

Mode: : 5210 Bandedge

: AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5150.000	8.08	34.47	38.47	49.20	53.28	74.00	-20.72	
2	pp 5228.644	8.12	34.45	38.45	94.60	98.72	74.00	24.72	
3	5350.000	8.18	34.43	38.43	46.14	50.32	74.00	-23.68	

Mode:f; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:80MHz;



Condition: 3m Vertical

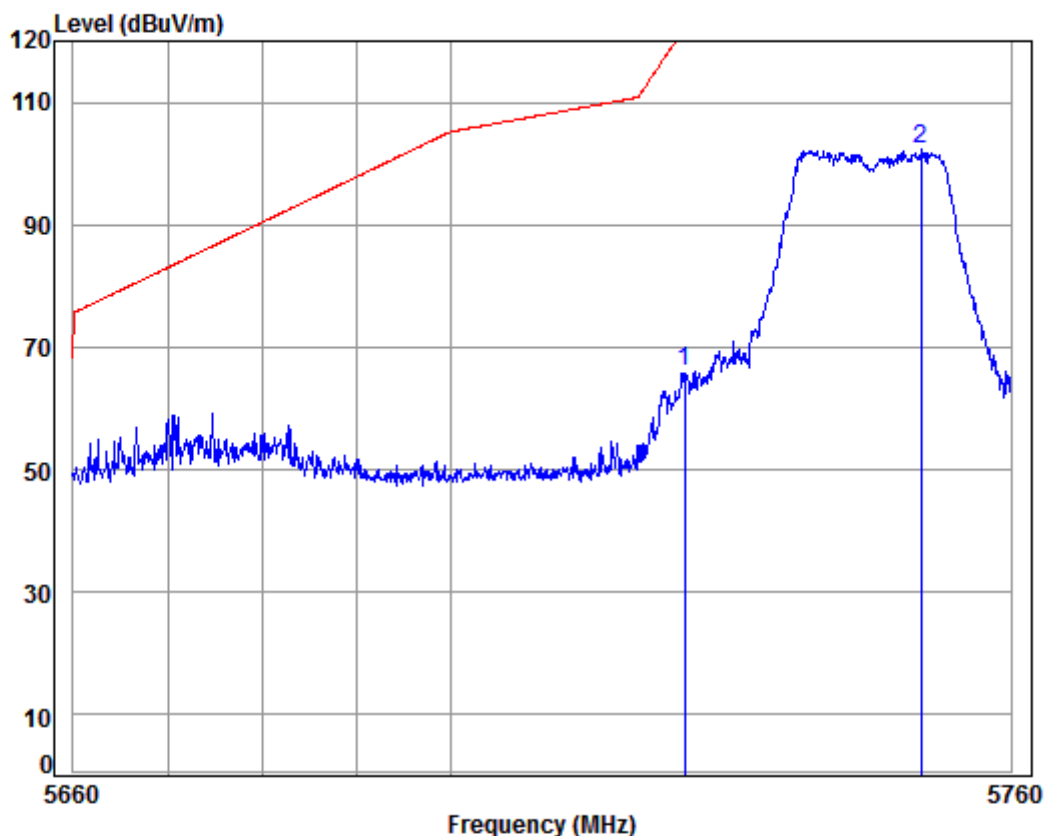
Job No: : CDT

Mode: : 5210 Bandedge

: AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5150.000	8.08	34.47	38.47	44.54	48.62	74.00	-25.38	
2	pp 5228.644	8.12	34.45	38.45	84.49	88.61	74.00	14.61	
3	5350.000	8.18	34.43	38.43	45.39	49.57	74.00	-24.43	

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



Condition: 3m Horizontal

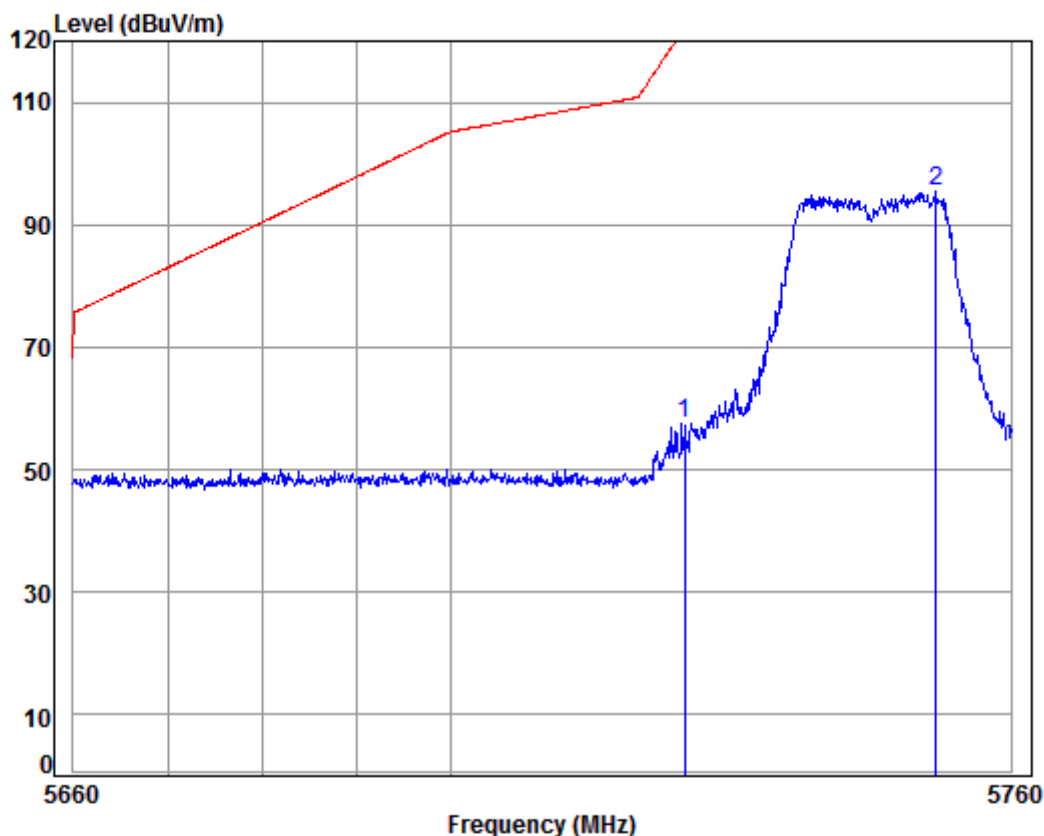
Job No: : CDT

Mode: : 5745 Band edge

: A20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	39.03	62.20	66.19	122.20	-56.01	
2 pp	5750.324	8.51	34.55	39.02	98.17	102.21	125.20	-22.99	

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



Condition: 3m Vertical

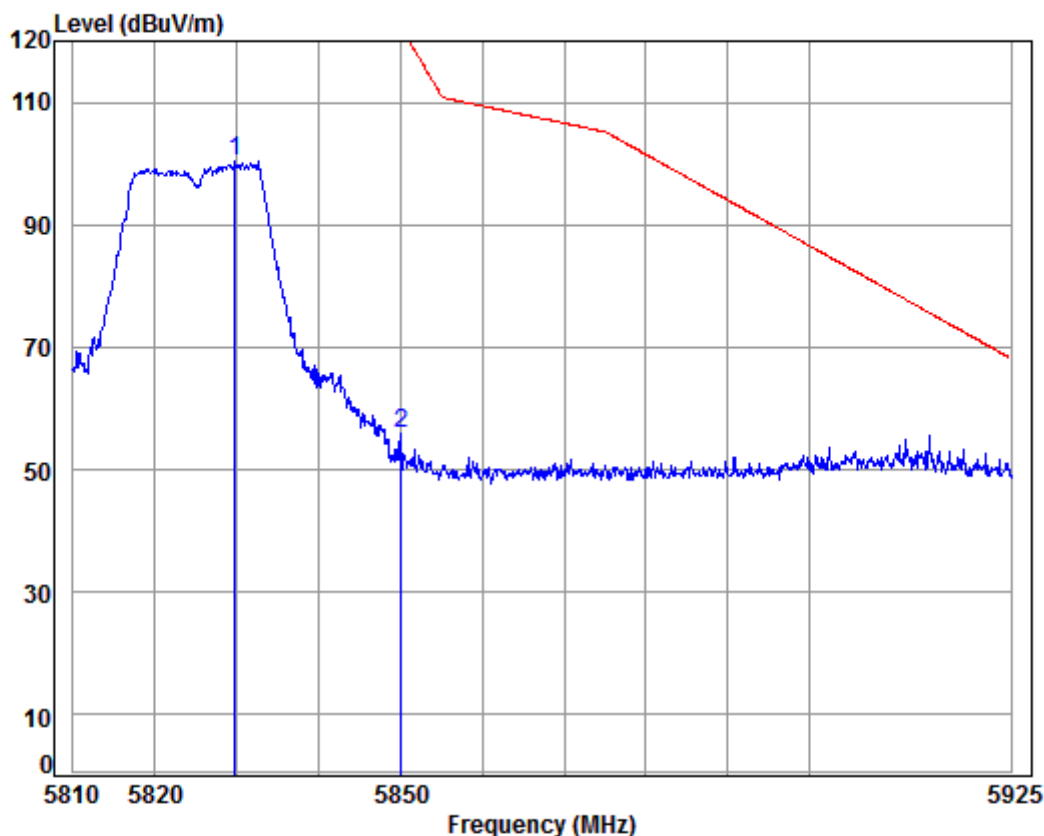
Job No: : CDT

Mode: : 5745 Band edge

: A20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	39.03	53.55	57.54	122.20	-64.66	
2	pp 5751.936	8.51	34.55	39.02	91.45	95.49	125.20	-29.71	

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



Condition: 3m Horizontal

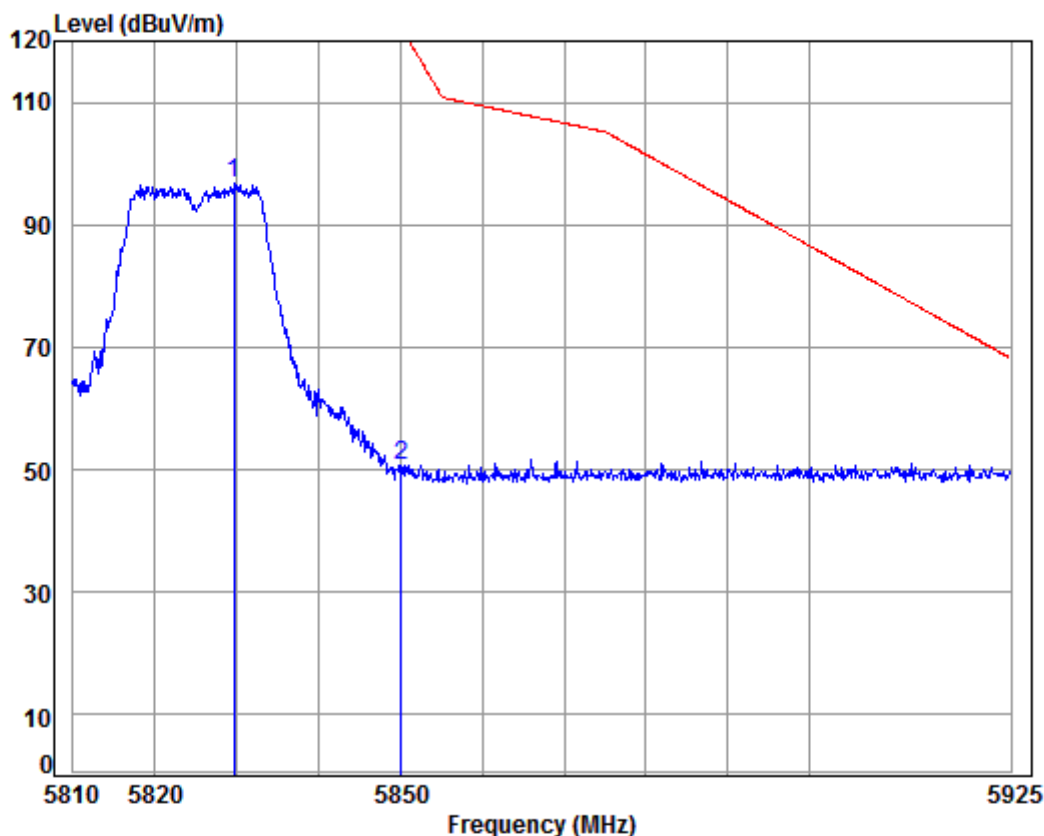
Job No: : CDT

Mode: : 5825 Bandedge

: A20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5829.734	8.58	34.60	38.33	95.55	100.40	125.20	-24.80	
2	5850.000	8.60	34.61	38.33	51.07	55.95	122.20	-66.25	

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



Condition: 3m Vertical

Job No: : CDT

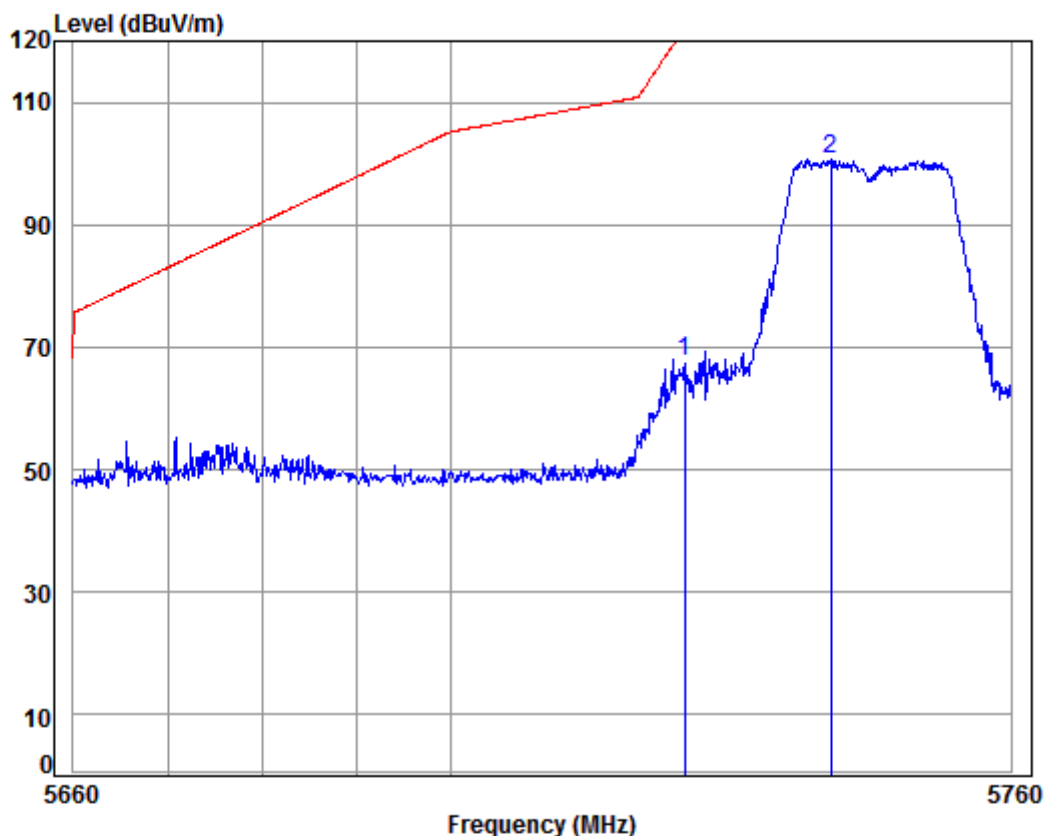
Mode: : 5825 Bandedge

: A20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5829.620	8.58	34.60	38.33	91.81	96.66	125.20	-28.54	
2	5850.000	8.60	34.61	38.33	45.72	50.60	122.20	-71.60	



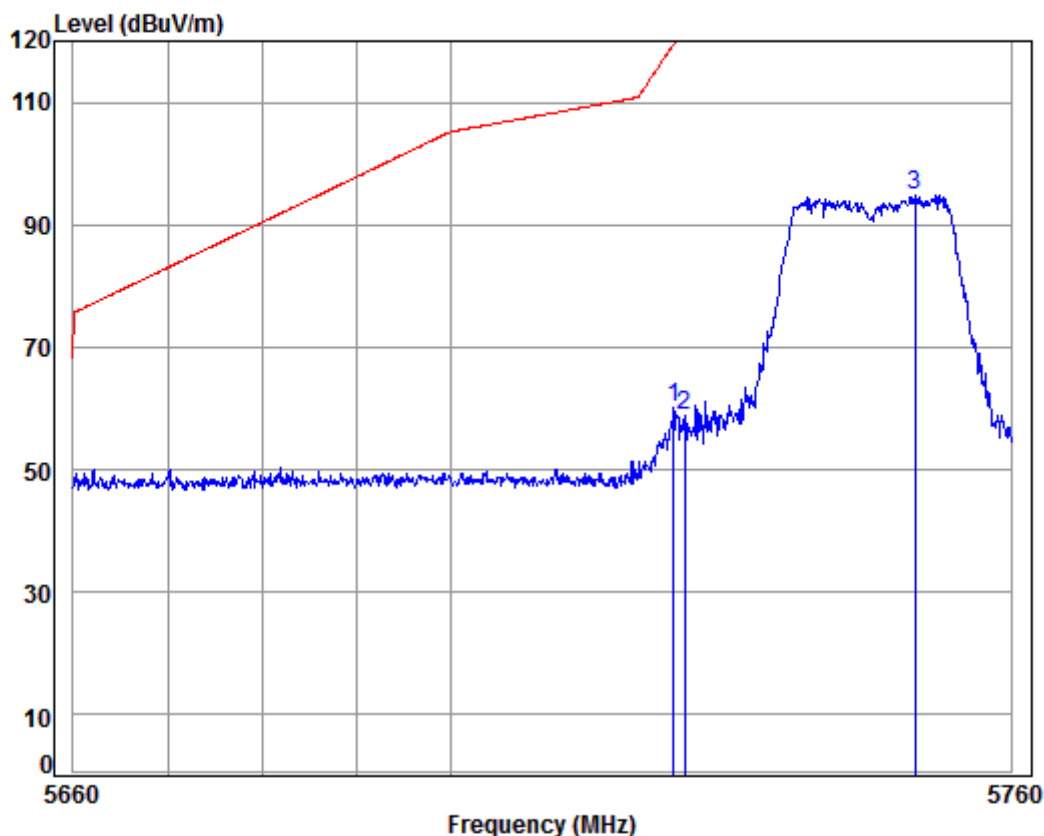
Mode:g; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:20MHz; Channel:Low



Condition: 3m Horizontal
Job No: : CDT
Mode: : 5745 Band edge
: N20

	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	5725.000	8.48	34.54	39.03	63.83	67.82	122.20	-54.38	
2 pp	5740.664	8.50	34.55	39.02	96.63	100.66	125.20	-24.54	

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



Condition: 3m Vertical

Job No: : CDT

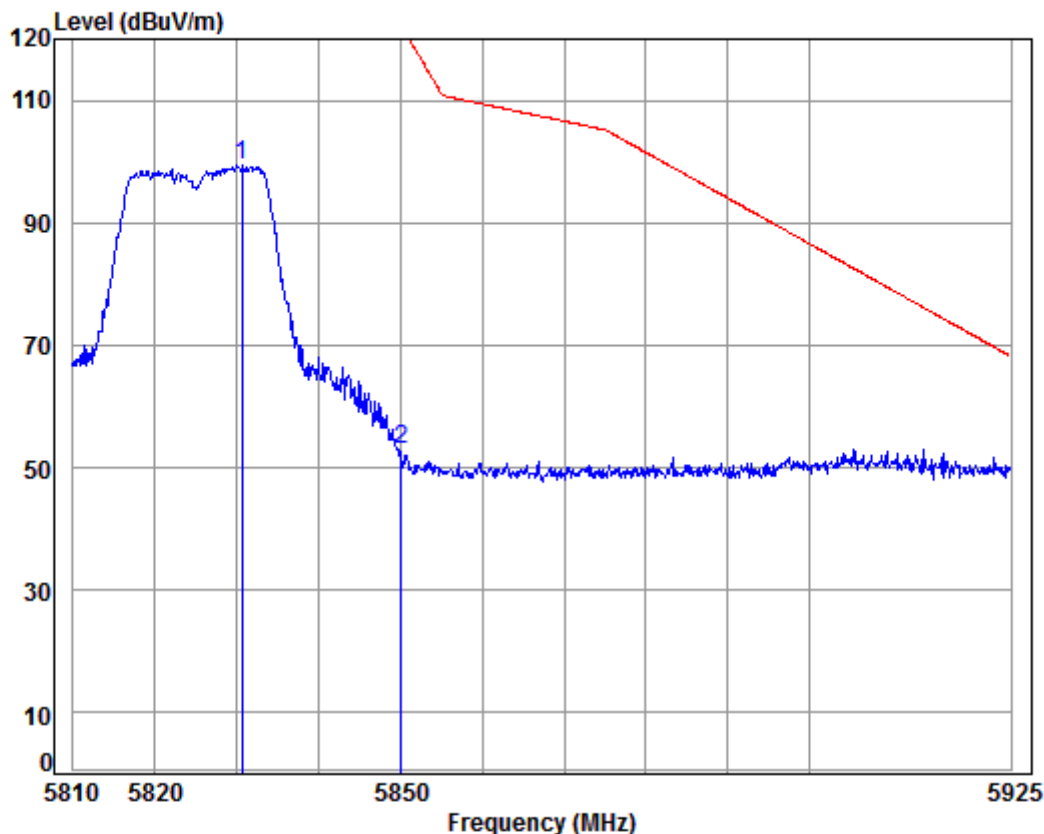
Mode: : 5745 Band edge

: N20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5723.798	8.48	34.54	39.03	56.12	60.11	119.46	-59.35	
2	5725.000	8.48	34.54	39.03	54.85	58.84	122.20	-63.36	
3 pp	5749.720	8.51	34.55	39.02	90.86	94.90	125.20	-30.30	



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

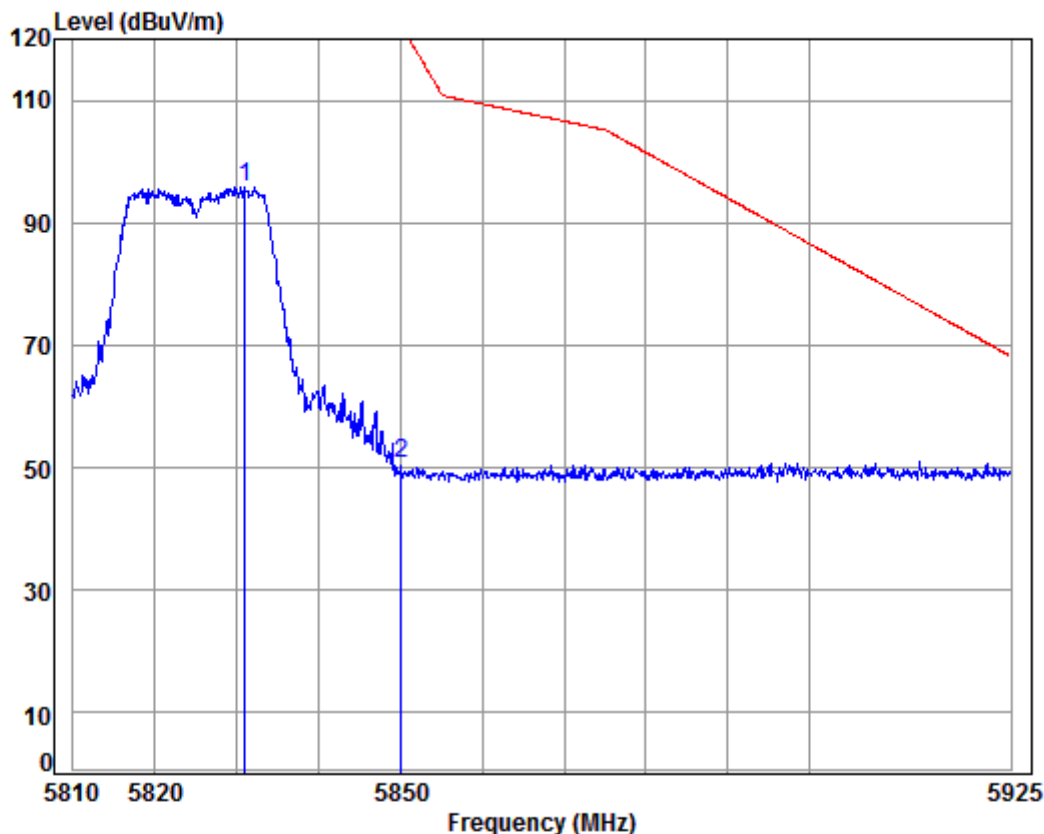


Condition: 3m Horizontal
Job No: : CDT
Mode: : 5825 Bandedge
: N20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5830.534	8.59	34.60	38.33	94.64	99.50	125.20	-25.70	
2	5850.000	8.60	34.61	38.33	47.98	52.86	122.20	-69.34	



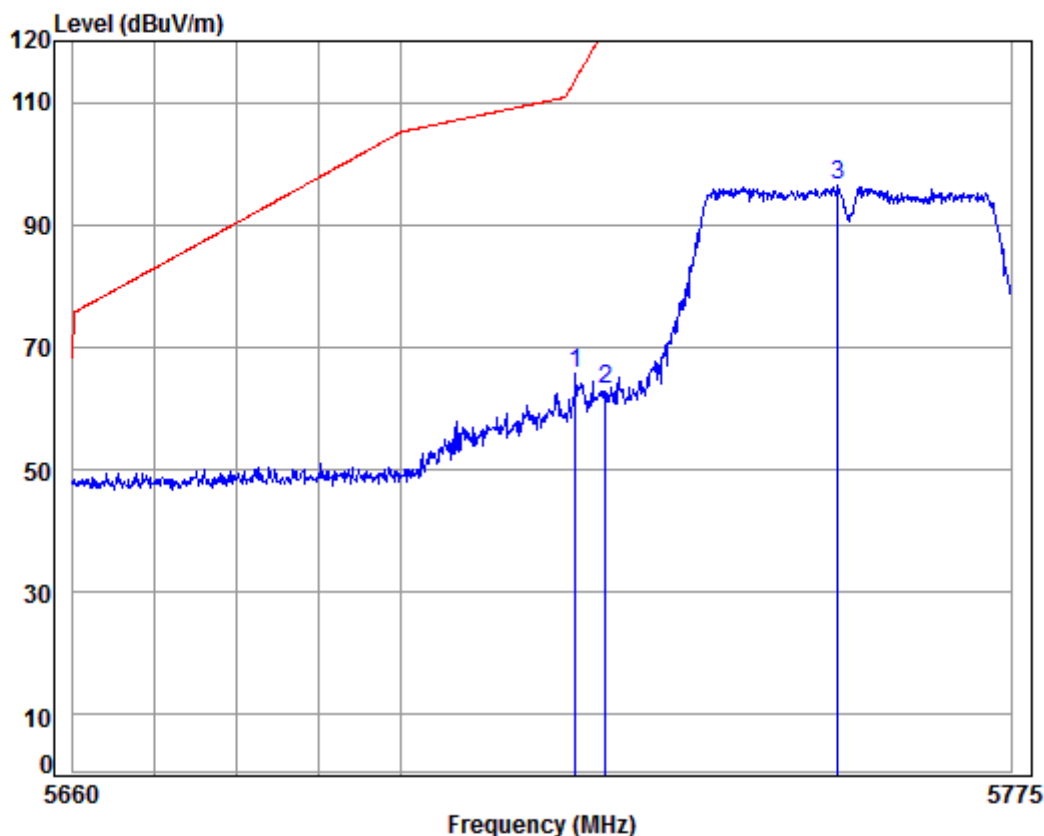
Mode:g; Polarization:Vertical; Modulation Type:802.11n; bandwidth:20MHz; Channel:High



Condition: 3m Vertical
Job No: : CDT
Mode: : 5825 Bandedge
: N20

		Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5830.877	8.59	34.60	38.33	90.92	95.78	125.20	-29.42
2	5850.000	8.60	34.61	38.33	45.81	50.69	122.20	-71.51

Mode:g; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low



Condition: 3m Horizontal

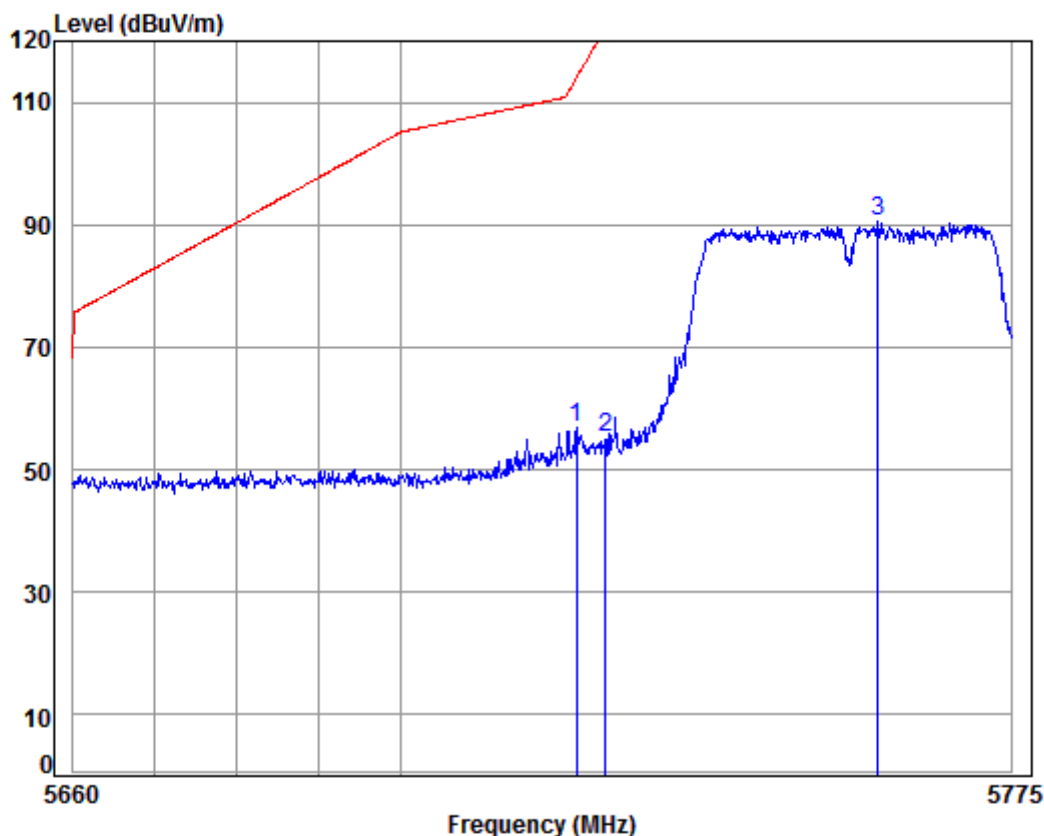
Job No: : CDT

Mode: : 5755 Band edge

: N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5721.352	8.48	34.54	39.03	61.67	65.66	113.88	-48.22	
2	5725.000	8.48	34.54	39.03	59.19	63.18	122.20	-59.02	
3 pp	5753.666	8.51	34.56	39.02	92.25	96.30	125.20	-28.90	

Mode:g; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low



Condition: 3m Vertical

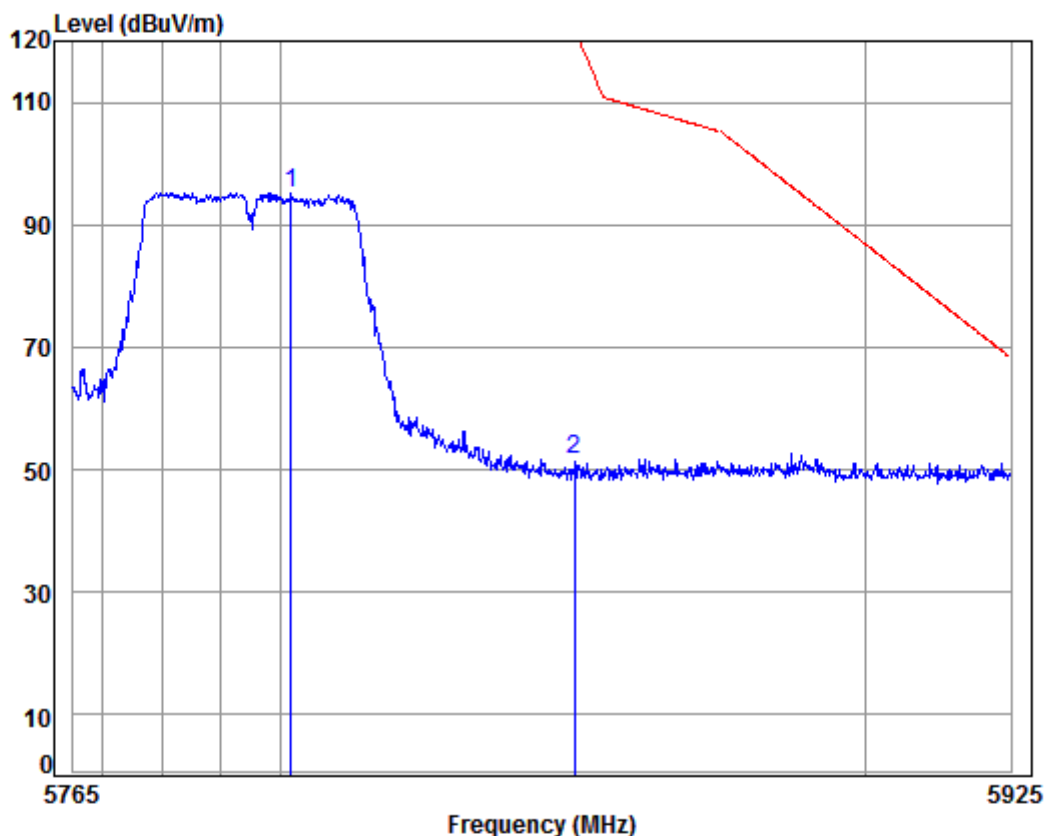
Job No: : CDT

Mode: : 5755 Band edge

: N40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5721.467	8.48	34.54	39.03	52.82	56.81	114.15	-57.34	
2	5725.000	8.48	34.54	39.03	51.38	55.37	122.20	-66.83	
3 pp	5758.529	8.51	34.56	39.02	86.37	90.42	125.20	-34.78	

Mode:g; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:High



Condition: 3m Horizontal

Job No: : CDT

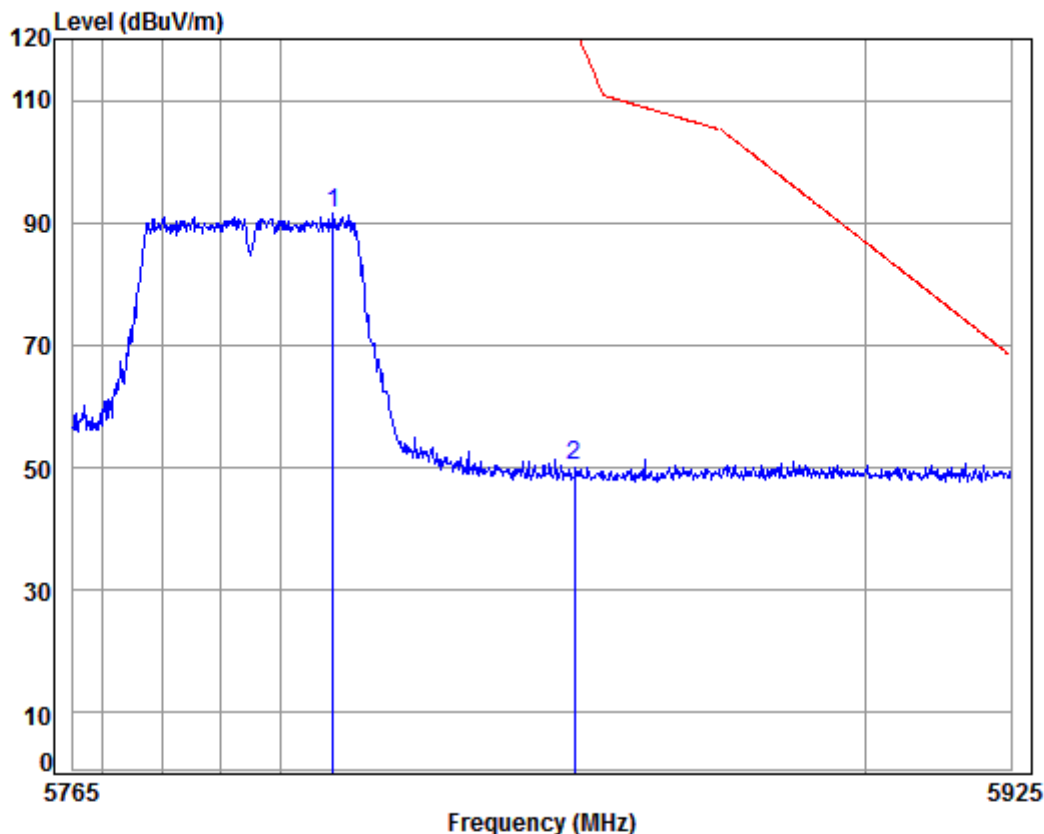
Mode: : 5795 Bandedge

: N40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5801.890	8.56	34.58	38.34	90.43	95.23	125.20	-29.97	
2	5850.000	8.60	34.61	38.33	46.72	51.60	122.20	-70.60	



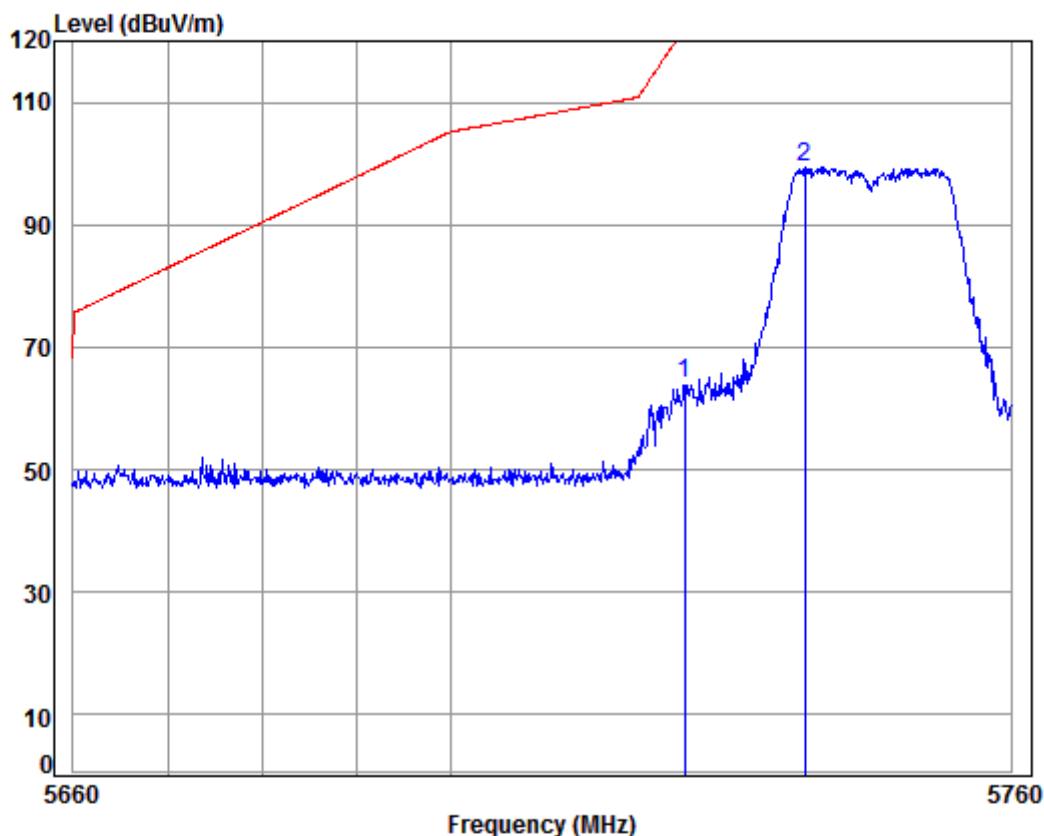
Mode:g; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:High



Condition: 3m Vertical
Job No: : CDT
Mode: : 5795 Bandedge
: N40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5808.882	8.56	34.59	38.34	86.70	91.51	125.20	-33.69	
2	5850.000	8.60	34.61	38.33	45.39	50.27	122.20	-71.93	

Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:20MHz; Channel:Low



Condition: 3m Horizontal

Job No: : CDT

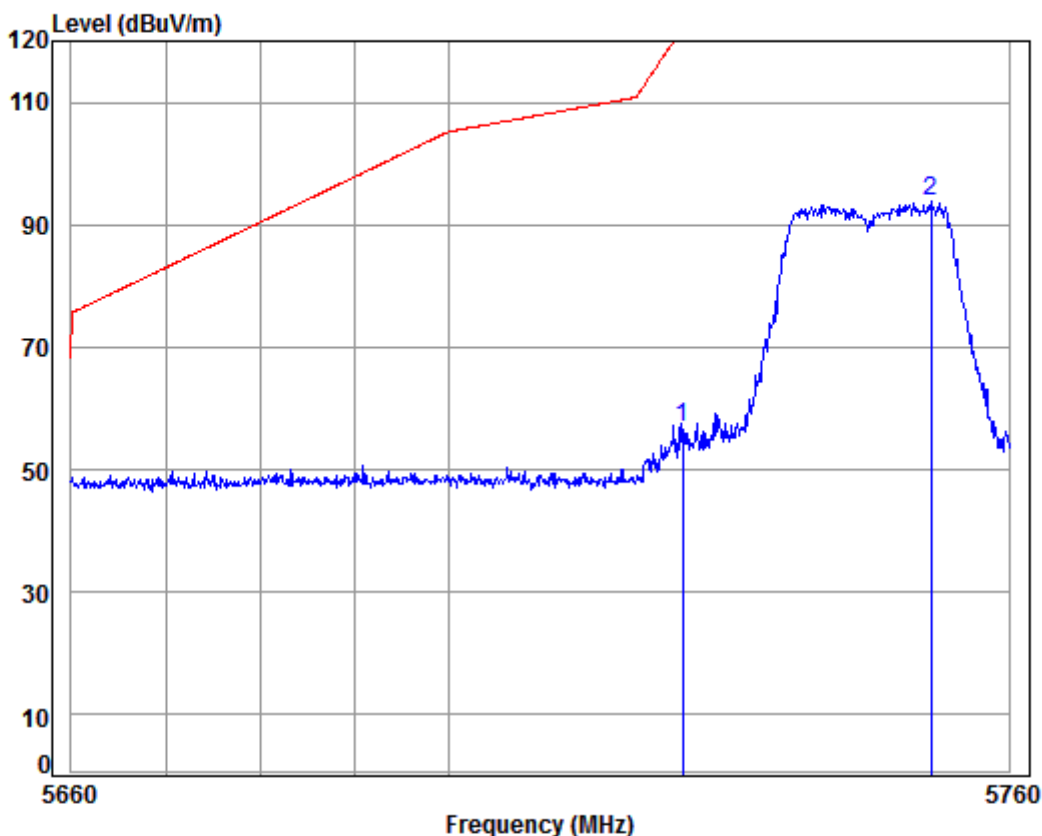
Mode: : 5745 Band edge

: AC20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	39.03	60.21	64.20	122.20	-58.00	
2	pp 5737.850	8.49	34.55	39.02	95.47	99.49	125.20	-25.71	



Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:20MHz; Channel:Low

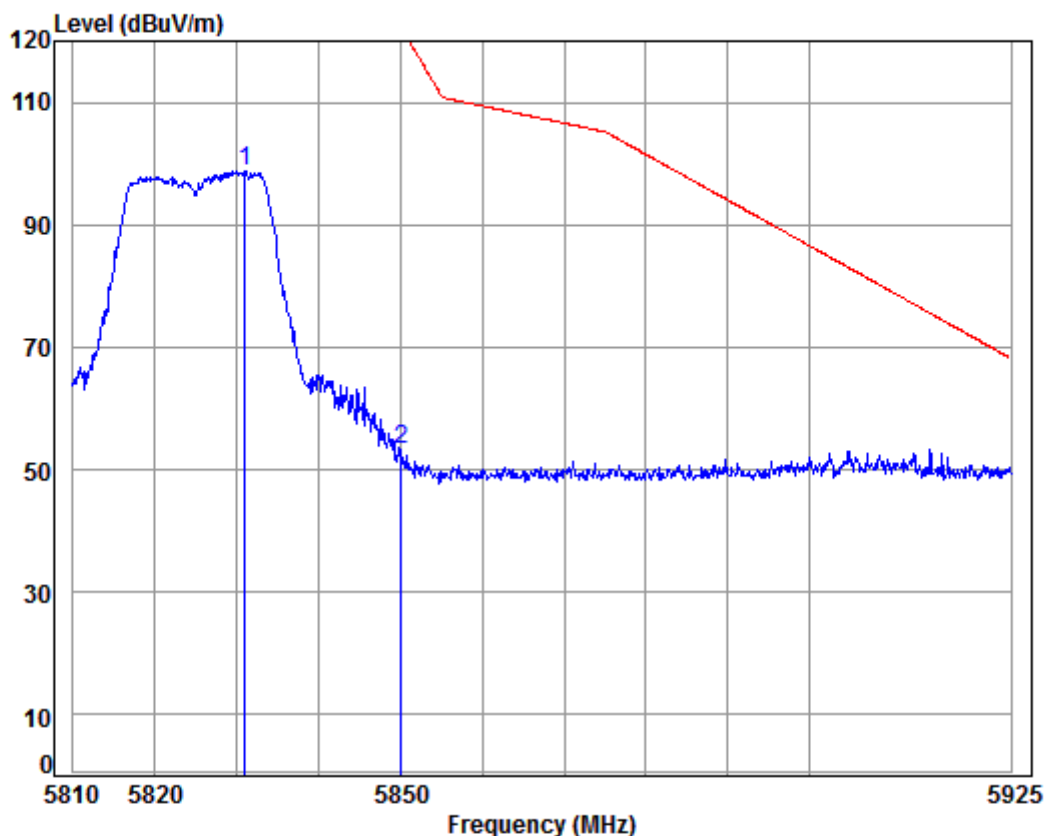


Condition: 3m Vertical
Job No: : CDT
Mode: : 5745 Band edge
: AC20

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	39.03	52.77	56.76	122.20	-65.44	
2 pp	5751.633	8.51	34.55	39.02	89.65	93.69	125.20	-31.51	



Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:20MHz; Channel:High

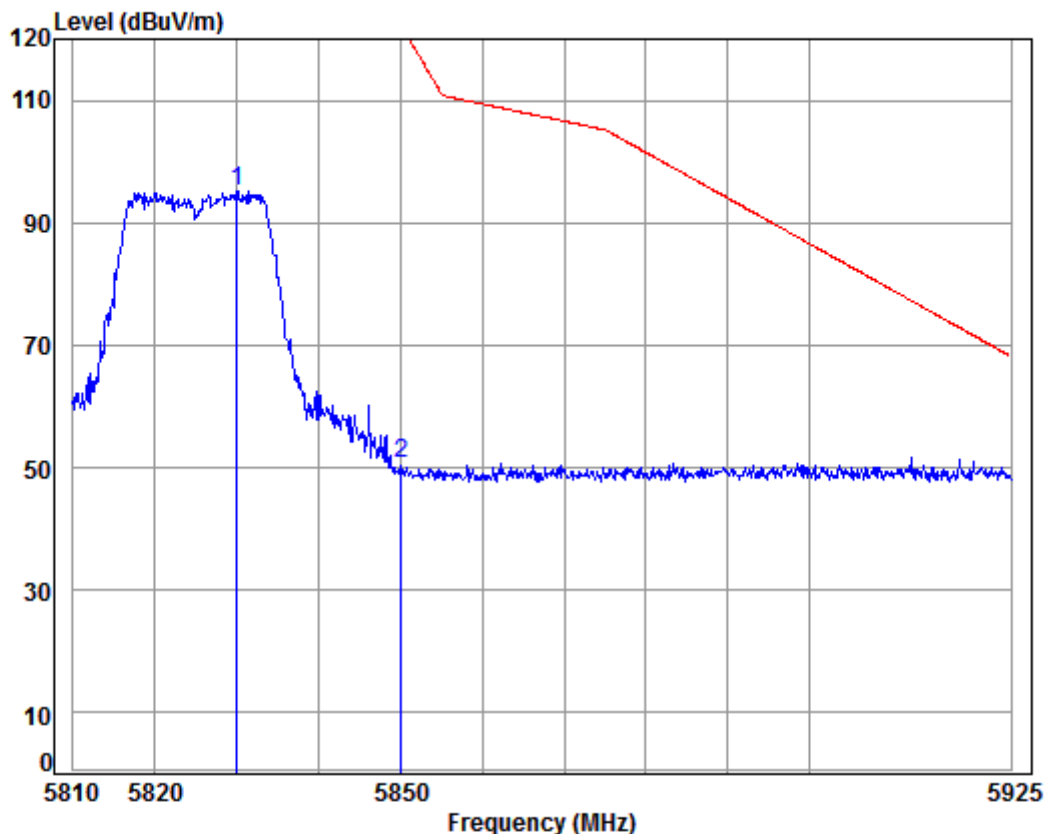


Condition: 3m Horizontal
Job No: : CDT
Mode: : 5825 Bandedge
: AC20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5830.877	8.59	34.60	38.33	93.88	98.74	125.20	-26.46	
2	5850.000	8.60	34.61	38.33	48.39	53.27	122.20	-68.93	



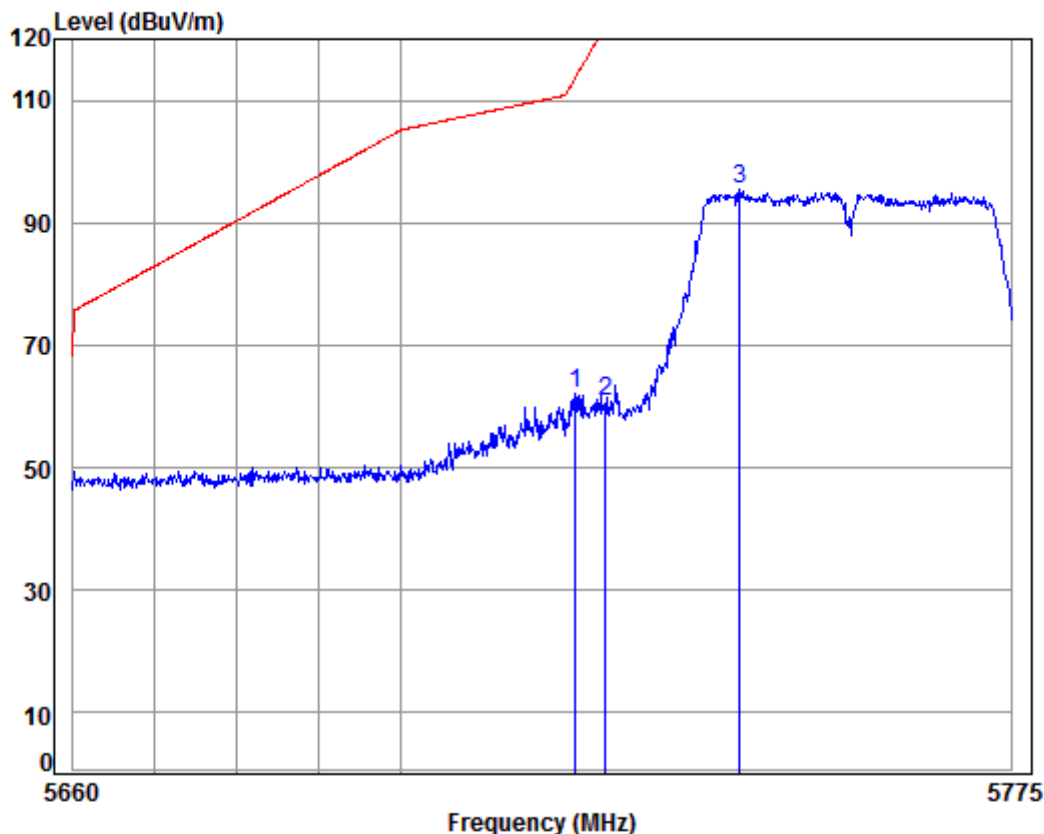
Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:20MHz; Channel:High



Condition: 3m Vertical
Job No: : CDT
Mode: : 5825 Bandedge
: AC20

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5829.962	8.58	34.60	38.33	90.31	95.16	125.20	-30.04	
2	5850.000	8.60	34.61	38.33	45.67	50.55	122.20	-71.65	

Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low



Condition: 3m Horizontal

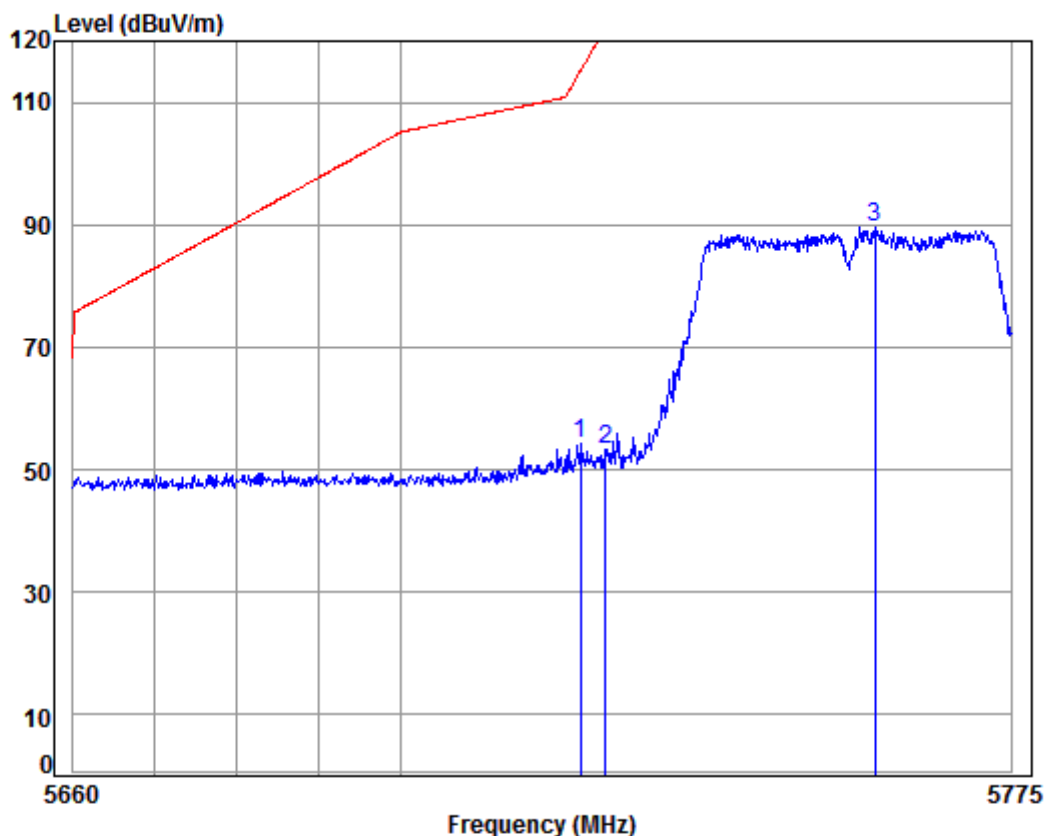
Job No: : CDT

Mode: : 5755 Band edge

: AC40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5721.352	8.48	34.54	39.03	58.11	62.10	113.88	-51.78	
2	5725.000	8.48	34.54	39.03	56.97	60.96	122.20	-61.24	
3 pp	5741.527	8.50	34.55	39.02	91.51	95.54	125.20	-29.66	

Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low



Condition: 3m Vertical

Job No: : CDT

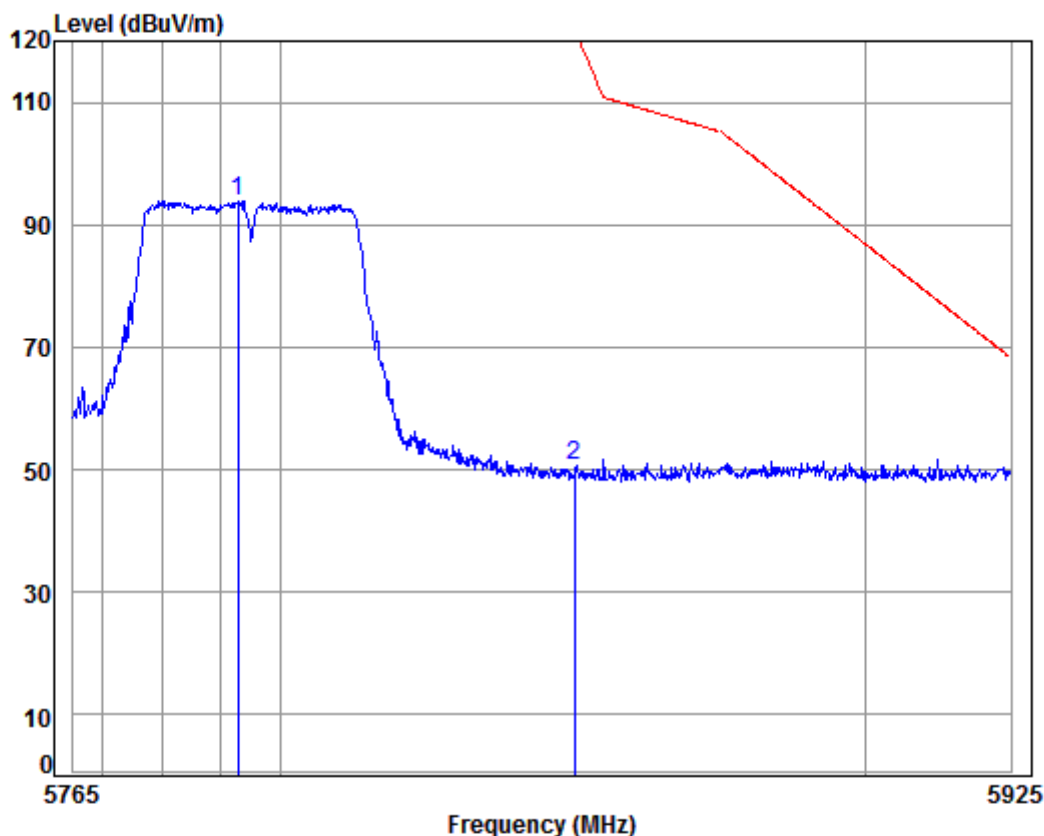
Mode: : 5755 Band edge

: AC40

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5721.928	8.48	34.54	39.03	50.40	54.39	115.20	-60.81	
2	5725.000	8.48	34.54	39.03	49.22	53.21	122.20	-68.99	
3 pp	5758.181	8.51	34.56	39.02	85.47	89.52	125.20	-35.68	



Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High



Condition: 3m Horizontal

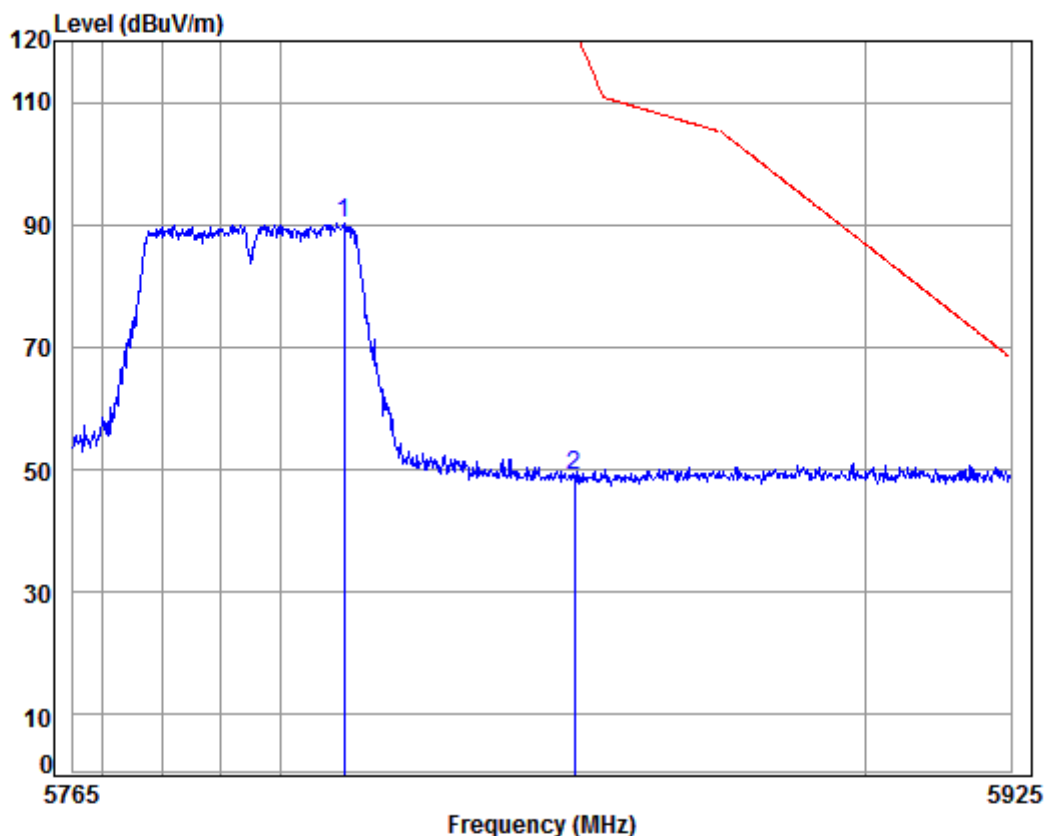
Job No: : CDT

Mode: : 5795 Bandedge

: AC40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1 pp	5792.843	8.55	34.58	38.34	89.19	93.98	125.20	-31.22	
2	5850.000	8.60	34.61	38.33	45.91	50.79	122.20	-71.41	

Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High



Condition: 3m Vertical

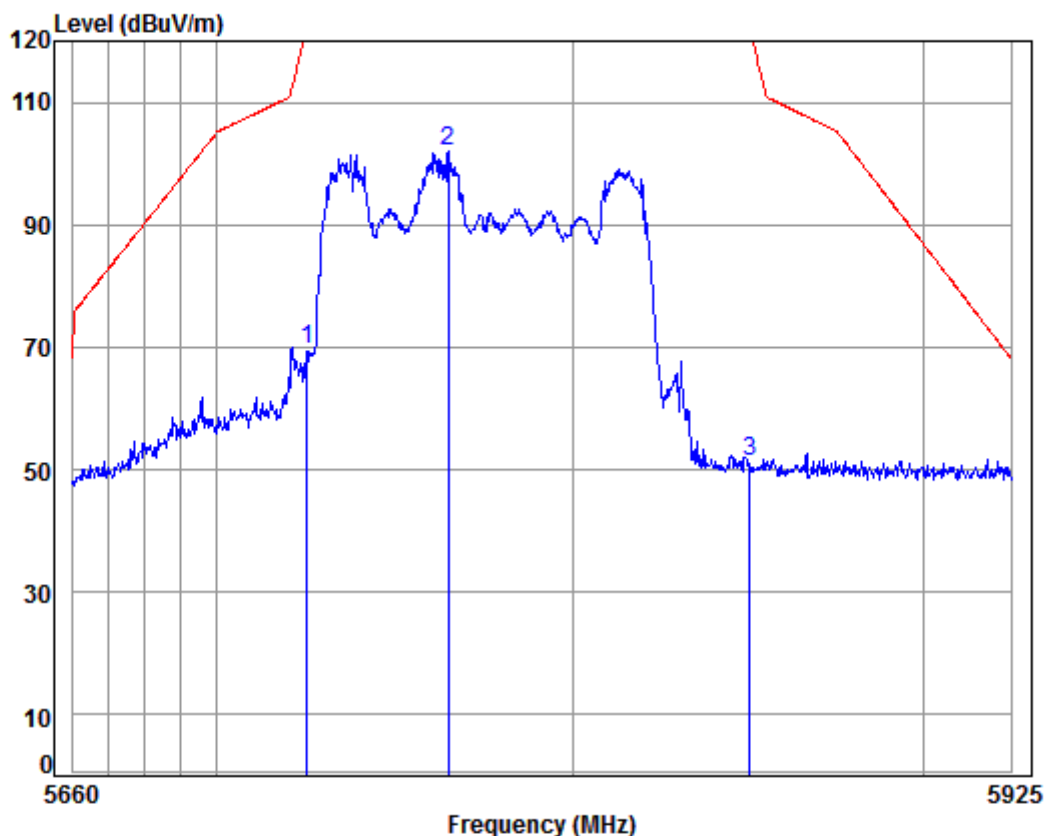
Job No: : CDT

Mode: : 5795 Bandedge

: AC40

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	pp 5810.791	8.57	34.59	38.34	85.44	90.26	125.20	-34.94	
2	5850.000	8.60	34.61	38.33	44.07	48.95	122.20	-73.25	

Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:80MHz;



Condition: 3m Horizontal

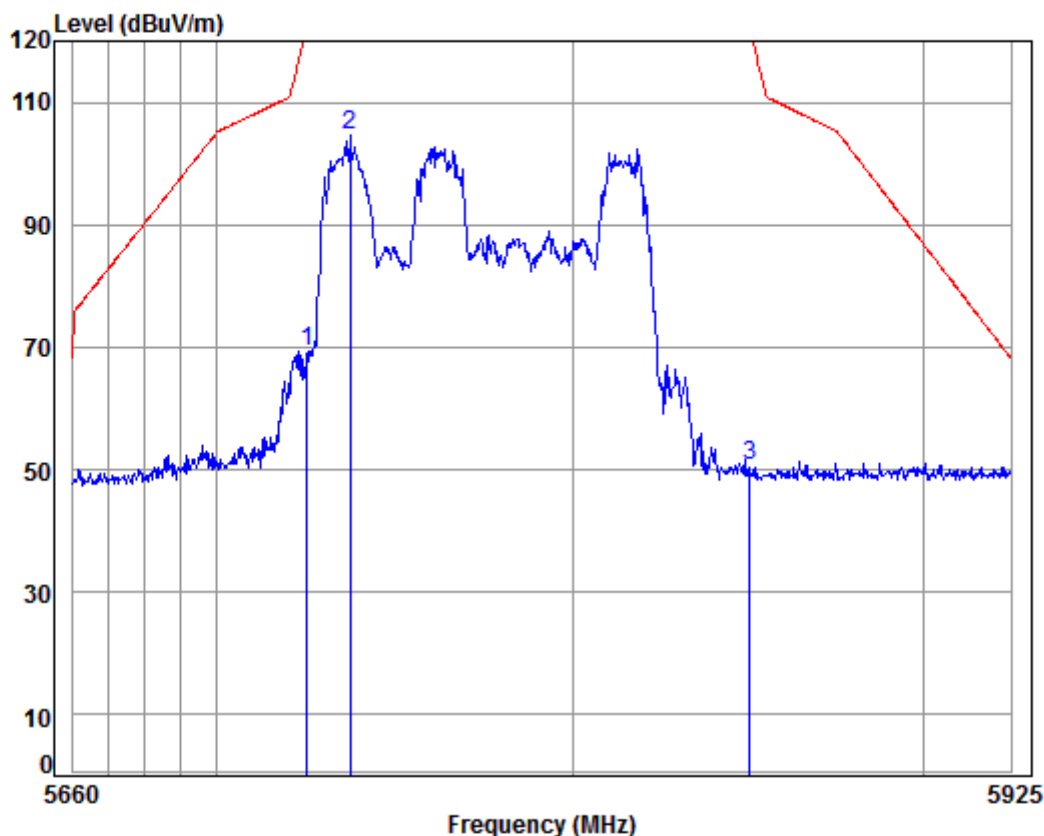
Job No: : CDT

Mode: : 5775 Bandedge

: AC80

	Freq	Cable Loss	Ant Factor	Preamplifier Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	38.35	64.87	69.54	122.20	-52.66	
2	pp 5764.547	8.52	34.56	38.35	97.18	101.91	125.20	-23.29	
3	5850.000	8.60	34.61	38.33	46.33	51.21	122.20	-70.99	

Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:80MHz;



Condition: 3m Vertical

Job No: : CDT

Mode: : 5775 Bandedge

: AC80

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	5725.000	8.48	34.54	38.35	64.65	69.32	122.20	-52.88	
2	pp 5736.918	8.49	34.55	38.35	99.84	104.53	125.20	-20.67	
3	5850.000	8.60	34.61	38.33	45.79	50.67	122.20	-71.53	



7.7 Frequency Stability

Test Requirement	47 CFR Part 15, Subpart E 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 45 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.

7.7.1 E.U.T. Operation

Operating Environment:

Temperature: 23.0 °C Humidity: 56 % RH Atmospheric Pressure: 1020 mbar

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.

d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.

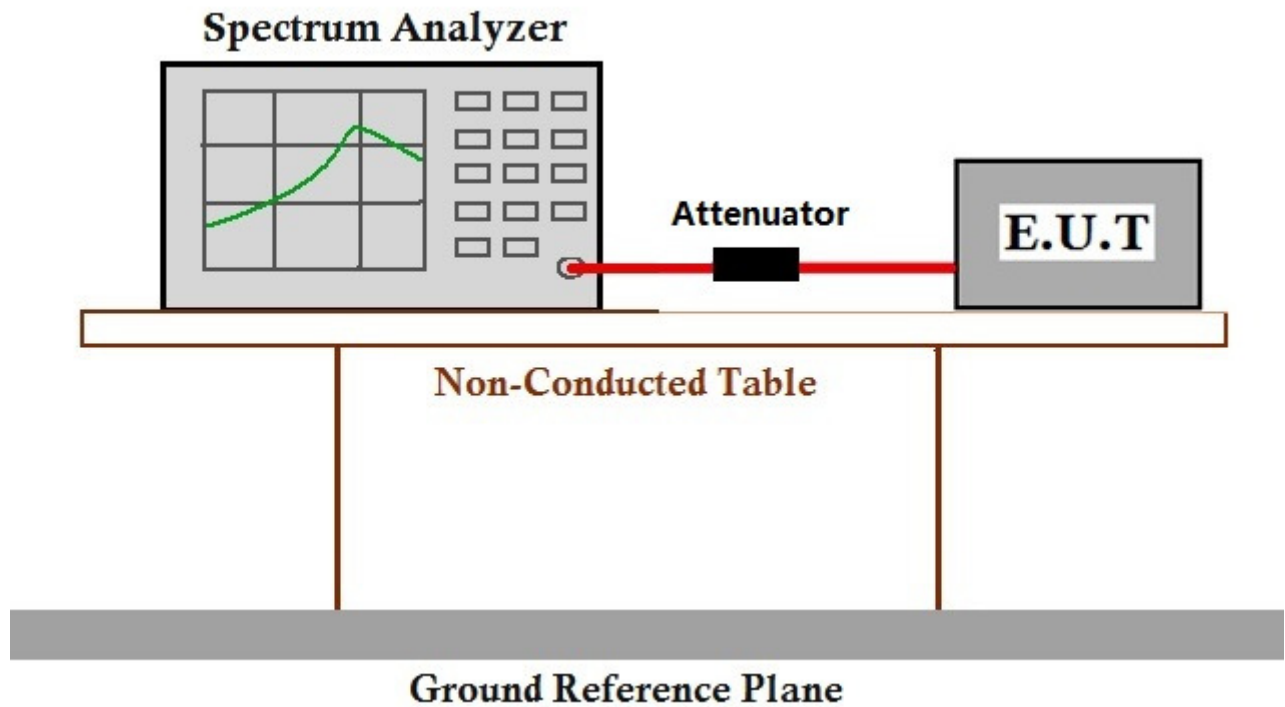
f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.

g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting. Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a;

MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40); MCS0 of rate is the worst case of 802.11ac(HT20); MCS0 of rate is the worst case of 802.11ac(HT40); MCS0 of rate is the worst case of 802.11ac(HT80)

Only the worst case is recorded in the report.

7.7.2 Test Setup Diagram



7.7.3 Measurement Data

The detailed test data see: Appendix 15.407



7.8 Radiated Spurious Emissions

Test Requirement 47 CFR Part 15, Subpart E 15.209 & 15.407(b)
Test Method: KDB 789033 D02 II G
Measurement Distance: 10m

7.8.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 54 % RH Atmospheric Pressure: 1020 mbar

Pretest these
mode to find the
worst case:

c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.
d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.
f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.
g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

The worst case
for final test:

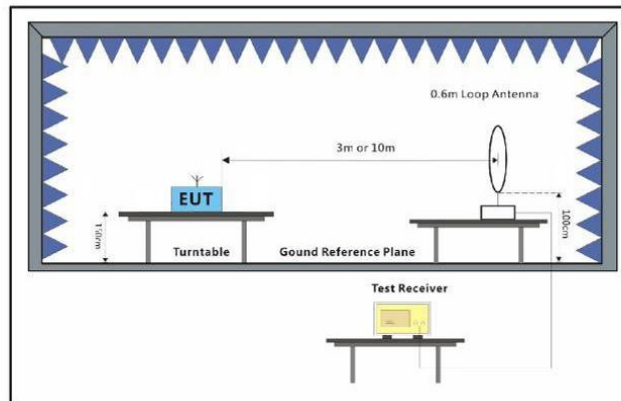
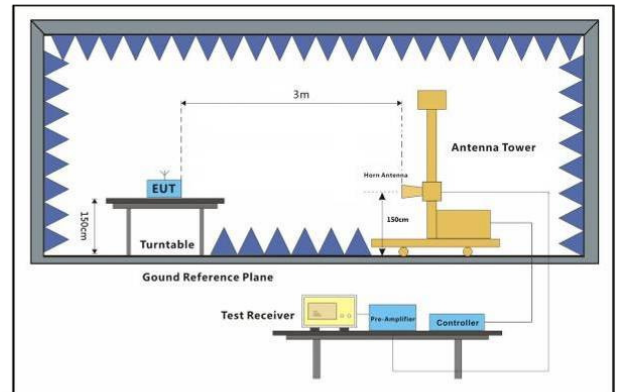
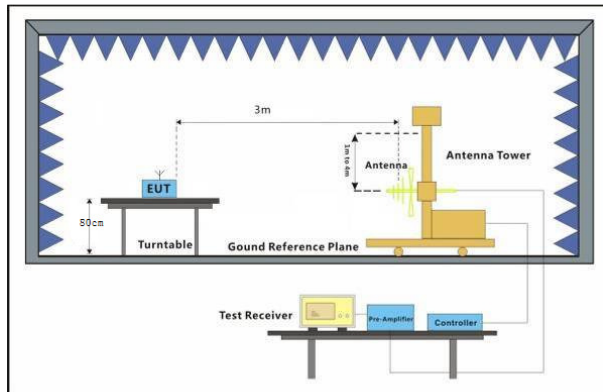
c: WIFI 5G TX band I (LS9-AC11DBT): Keep the EUT transmitting.
d: WIFI 5G TX band III (LS9-AC11DBT): Keep the EUT transmitting.
f: WIFI 5G TX band I (CDW-B18821A-00): Keep the EUT transmitting.
g: WIFI 5G TX band III (CDW-B18821A-00): Keep the EUT transmitting.

Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a;

MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40); 1SS0 of rate is the worst case of 802.11ac(HT20); 1SS0 of rate is the worst case of 802.11ac(HT40); 1SS0 of rate is the worst case of 802.11ac(HT80)

For below 1GHz, after Pre-scan, find the 1Mbps of rate of 802.11a at lowest channel is the worst case for 5G WIFI, 1Mbps of rate of 802.11b at lowest channel is the worst case for 2.4G WIFI, find the DH1 of data type and GFSK modulation is the worst case For BT, find the lowest channel is the worst case for BLE and 2.4G proprietry. so the final test was carried out at simultaneous transmission operations under the worst case of BT, BLE, 2.4G proprietry and 2.4G & 5G WIFI.

7.8.2 Test Setup Diagram





7.8.3 Measurement 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.



Radiated Emission below 1GHz:

The test was performed at a 10m test site. According to below formulate and the test data at 10m test distance,

$$L_3 / L_{10} = D_{10} / D_3$$

Note:

L_3 : Level @ 3m distance. Unit: uV/m;

L_{10} : Level @ 10m distance. Unit: uV/m;

D_3 : 3m distance. Unit: m

D_{10} : 10m distance. Unit: m

The level at 3m test distance is below:

Mode c:

Frequency (MHz)	Level @ 10m (dBuV/m)	Level @ 10m (uV/m)	Level @ 3m (uV/m)	Level @ 3m (dBuV/m)	Limit @ 3m (dBuV/m)	Margin (dB)	Ant. Polarization
40.99	26.15	20.30	67.67	36.61	40.00	-3.39	V
54.83	25.17	18.13	60.45	35.63	40.00	-4.37	V
147.40	23.92	15.70	52.35	34.38	43.50	-9.12	V
270.37	32.13	40.41	134.70	42.59	46.00	-3.41	V
295.15	31.19	36.27	120.89	41.65	46.00	-4.35	V
319.94	31.98	39.72	132.40	42.44	46.00	-3.56	V
34.76	22.61	13.51	45.02	33.07	40.00	-6.93	H
59.03	24.15	16.13	53.75	34.61	40.00	-5.39	H
64.43	24.37	16.54	55.13	34.83	40.00	-5.17	H
202.81	26.09	20.16	67.20	36.55	43.50	-6.95	H
319.94	23.80	15.49	51.63	34.26	46.00	-11.74	H
451.14	24.93	17.64	58.80	35.39	46.00	-10.61	H



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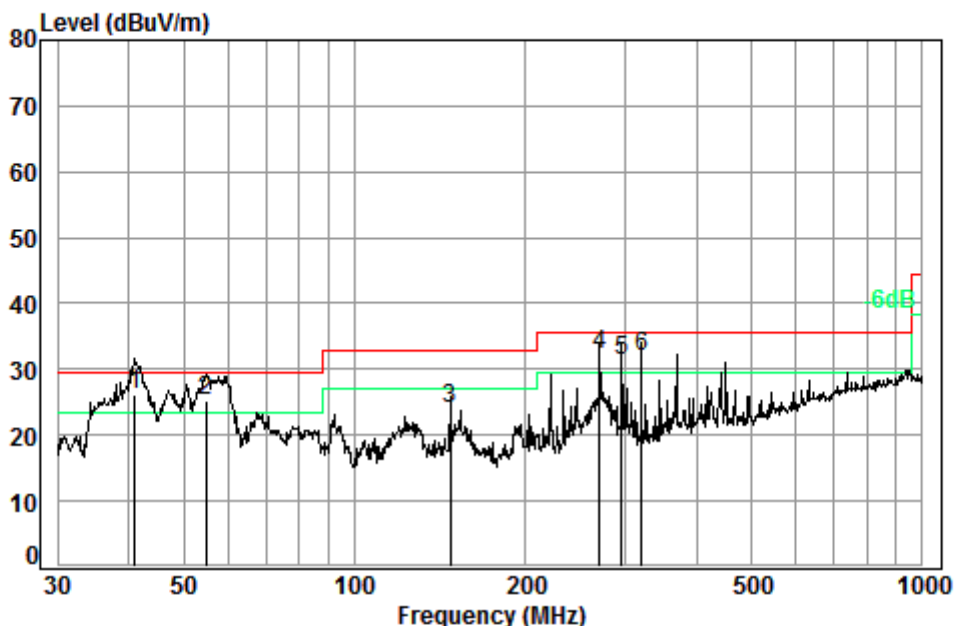
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Mode f:

Frequency (MHz)	Level @ 10m (dBuV/m)	Level @ 10m (uV/m)	Level @ 3m (uV/m)	Level @ 3m (dBuV/m)	Limit @ 3m (dBuV/m)	Margin (dB)	Ant. Polarization
33.33	26.33	20.73	69.08	36.79	40.00	-3.21	V
50.41	24.62	17.02	56.74	35.08	40.00	-4.92	V
153.74	26.18	20.37	67.90	36.64	43.50	-6.86	V
270.37	31.79	38.86	129.53	42.25	46.00	-3.75	V
295.15	31.75	38.68	128.94	42.21	46.00	-3.79	V
631.69	29.80	30.90	103.01	40.26	46.00	-5.74	V
33.09	26.00	19.95	66.51	36.46	40.00	-3.54	H
56.00	26.47	21.06	70.21	36.93	40.00	-3.07	H
73.62	24.97	17.72	59.07	35.43	40.00	-4.57	H
166.07	29.14	28.64	95.47	39.60	43.50	-3.90	H
270.37	28.74	27.35	91.18	39.20	46.00	-6.80	H
640.61	28.08	25.35	84.50	38.54	46.00	-7.46	H

Radiated Emission below 1GHz		
30MHz~1GHz (QP)		
Test mode:	c	Vertical



Condition: 10m VERTICAL

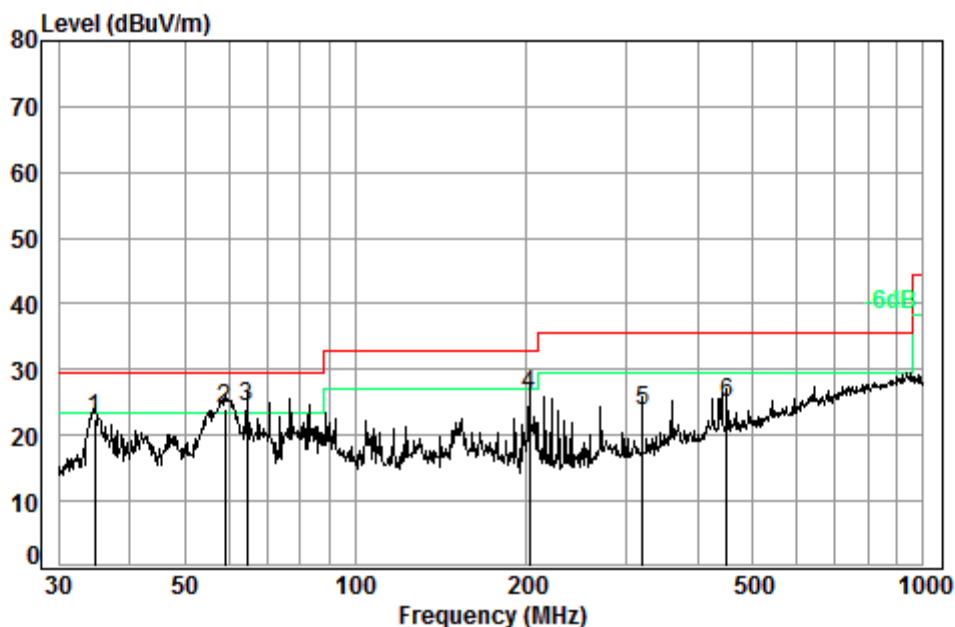
Job No. : 00699CR

Test Mode: c

	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 pp	40.99	6.80	13.23	32.99	39.11	26.15	29.50	-3.35
2	54.83	7.00	12.39	32.97	38.75	25.17	29.50	-4.33
3	147.40	7.44	13.25	32.74	35.97	23.92	33.00	-9.08
4	270.37	7.95	11.86	32.63	44.95	32.13	35.60	-3.47
5	295.15	8.04	12.54	32.60	43.21	31.19	35.60	-4.41
6	319.94	8.10	13.23	32.60	43.25	31.98	35.60	-3.62



Test mode:	c	Horizontal
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Condition: 10m HORIZONTAL

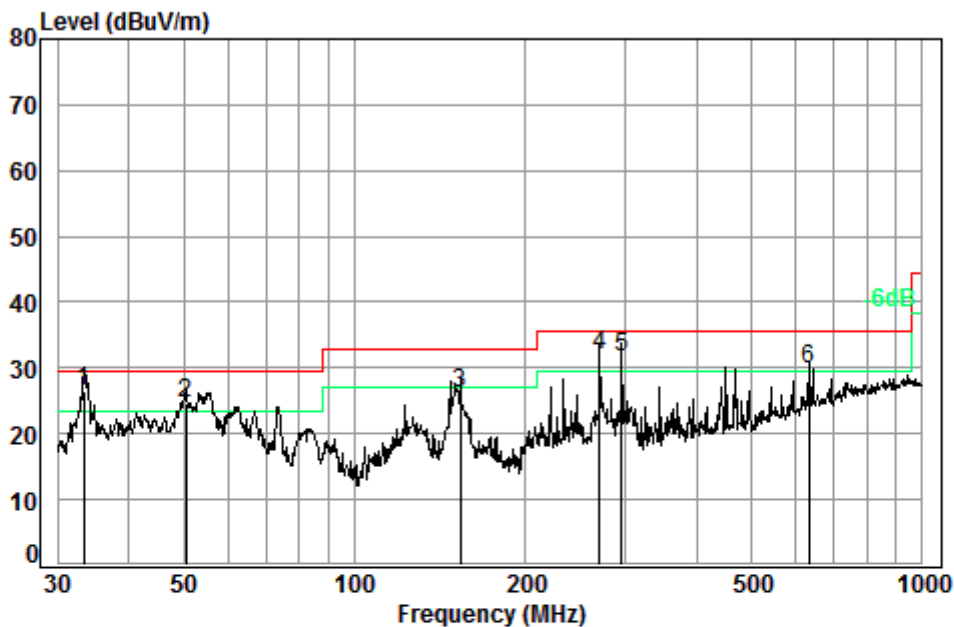
Job No. : 00699CR

Test Mode: c

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Level	Limit	Over
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	34.76	6.70	12.63	32.98	36.26	22.61	29.50	-6.89
2	59.03	7.00	12.07	32.95	38.03	24.15	29.50	-5.35
3 pp	64.43	7.00	11.11	32.93	39.19	24.37	29.50	-5.13
4	202.81	7.61	9.36	32.70	41.82	26.09	33.00	-6.91
5	319.94	8.10	13.23	32.60	35.07	23.80	35.60	-11.80
6	451.14	8.43	16.19	32.60	32.91	24.93	35.60	-10.67



30MHz~1GHz (QP)		
Test mode:	f	Vertical

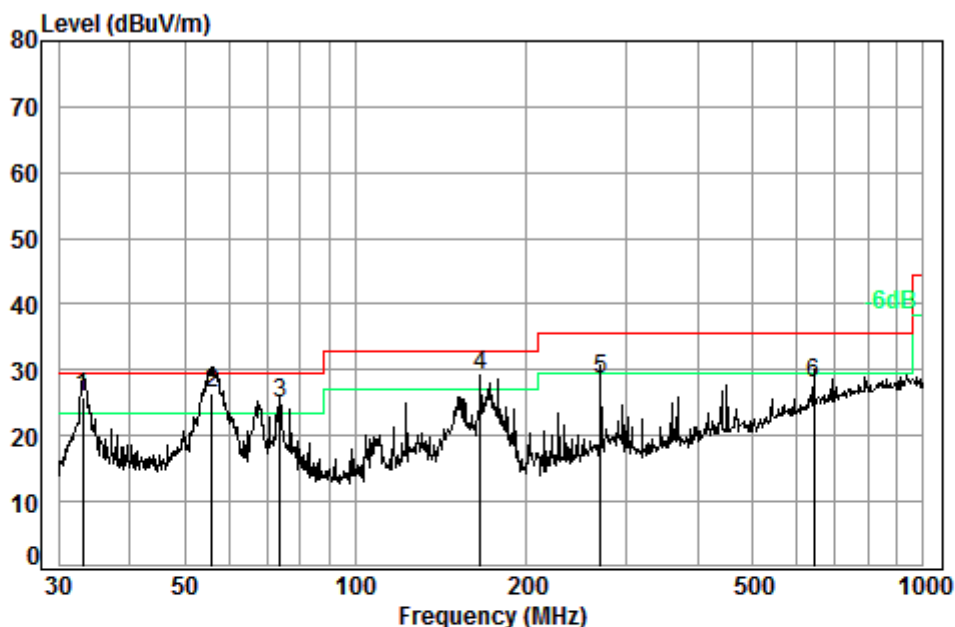


Condition: 10m VERTICAL
Job No. : 00699CR
Test Mode: f

		Cable	Ant	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	pp	33.33	6.70	12.59	32.97	40.01	26.33	29.50
2		50.41	6.91	12.75	33.00	37.96	24.62	29.50
3		153.74	7.47	13.40	32.74	38.05	26.18	33.00
4		270.37	7.95	11.86	32.63	44.61	31.79	35.60
5		295.15	8.04	12.54	32.60	43.77	31.75	35.60
6		631.69	8.98	19.31	32.60	34.11	29.80	35.60



Test mode:	f	Horizontal
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Condition: 10m HORIZONTAL

Job No. : 00699CR

Test Mode: f

		Cable	Ant	Preamp	Read		Limit	Over	
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	qp	33.09	6.70	12.58	32.97	39.69	26.00	29.50	-3.50
2	pp	56.00	7.00	12.30	32.97	40.14	26.47	29.50	-3.03
3		73.62	6.98	9.49	32.89	41.39	24.97	29.50	-4.53
4		166.07	7.50	12.79	32.73	41.58	29.14	33.00	-3.86
5		270.37	7.95	11.86	32.63	41.56	28.74	35.60	-6.86
6		640.61	9.00	19.42	32.60	32.26	28.08	35.60	-7.52



Radiated Emission above 1GHz

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.25	50.84	74	-23.16
8990.716	36.59	11.79	37.30	39.29	50.37	74	-23.63
10360.000	37.24	12.98	36.99	35.58	48.81	74	-25.19
12751.430	38.85	14.86	39.06	37.01	51.66	74	-22.34
15540.000	41.38	17.07	39.95	32.76	51.26	74	-22.74
17830.800	44.00	21.55	37.45	24.79	52.89	74	-21.11

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7093.172	36.46	10.64	38.30	41.79	50.59	74	-23.41
8990.716	36.59	11.79	37.30	39.61	50.69	74	-23.31
10360.000	37.24	12.98	36.99	35.14	48.37	74	-25.63
11734.470	38.34	14.27	38.04	36.25	50.82	74	-23.18
15540.000	41.38	17.07	39.95	33.53	52.03	74	-21.97
17596.580	43.58	20.75	37.66	26.28	52.95	74	-21.05



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	42.22	51.81	74	-22.19
9659.786	37.53	12.53	36.96	40.03	53.13	74	-20.87
10440.000	37.16	13.04	37.03	33.42	46.59	74	-27.41
12751.430	38.85	14.86	39.06	37.35	52.00	74	-22.00
15660.000	41.34	17.18	39.83	33.14	51.83	74	-22.17
17830.800	44.00	21.55	37.45	25.28	53.38	74	-20.62

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7664.340	36.40	10.88	37.72	40.50	50.06	74	-23.94
8328.564	36.20	11.58	37.37	41.15	51.56	74	-22.44
10440.000	37.16	13.04	37.03	34.11	47.28	74	-26.72
12751.430	38.85	14.86	39.06	36.64	51.29	74	-22.71
15660.000	41.34	17.18	39.83	34.04	52.73	74	-21.27
17464.130	43.36	20.30	37.78	27.12	53.00	74	-21.00



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7079.786	36.47	10.63	38.32	41.38	50.16	74	-23.84
8328.564	36.20	11.58	37.37	42.93	53.34	74	-20.66
10480.000	37.12	13.07	37.05	34.08	47.22	74	-26.78
12775.540	38.84	14.93	39.08	38.23	52.92	74	-21.08
15720.000	41.31	17.24	39.77	33.89	52.67	74	-21.33
17830.800	44.00	21.55	37.45	25.35	53.45	74	-20.55

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7120.020	36.45	10.65	38.27	41.57	50.40	74	-23.60
8990.716	36.59	11.79	37.30	39.55	50.63	74	-23.37
10480.000	37.12	13.07	37.05	33.25	46.39	74	-27.61
13192.440	38.72	15.60	39.54	35.41	50.19	74	-23.81
15720.000	41.31	17.24	39.77	33.48	52.26	74	-21.74
17864.510	44.06	21.66	37.42	25.34	53.64	74	-20.36



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.46	51.05	74	-22.95
8328.564	36.20	11.58	37.37	42.30	52.71	74	-21.29
10360.000	37.24	12.98	36.99	35.99	49.22	74	-24.78
12775.540	38.84	14.93	39.08	36.56	51.25	74	-22.75
15540.000	41.38	17.07	39.95	34.10	52.60	74	-21.40
17830.800	44.00	21.55	37.45	24.52	52.62	74	-21.38

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8328.564	36.20	11.58	37.37	41.79	52.20	74	-21.80
10360.000	37.24	12.98	36.99	35.97	49.20	74	-24.80
11756.660	38.36	14.30	38.06	36.91	51.51	74	-22.49
13217.380	38.71	15.61	39.57	36.00	50.75	74	-23.25
15540.000	41.38	17.07	39.95	34.59	53.09	74	-20.91
17830.800	44.00	21.55	37.45	24.79	52.89	74	-21.11



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7693.350	36.42	10.90	37.69	40.52	50.15	74	-23.85
10440.000	37.16	13.04	37.03	33.50	46.67	74	-27.33
11734.470	38.34	14.27	38.04	36.22	50.79	74	-23.21
13804.270	38.97	16.03	40.27	38.31	53.04	74	-20.96
15660.000	41.34	17.18	39.83	34.21	52.90	74	-21.10
17830.800	44.00	21.55	37.45	25.26	53.36	74	-20.64

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	40.60	50.19	74	-23.81
9007.715	36.61	11.80	37.30	38.83	49.94	74	-24.06
10440.000	37.16	13.04	37.03	33.12	46.29	74	-27.71
13192.440	38.72	15.60	39.54	35.68	50.46	74	-23.54
15660.000	41.34	17.18	39.83	34.10	52.79	74	-21.21
17864.510	44.06	21.66	37.42	24.65	52.95	74	-21.05



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8328.564	36.20	11.58	37.37	42.56	52.97	74	-21.03
10480.000	37.12	13.07	37.05	34.35	47.49	74	-26.51
11734.470	38.34	14.27	38.04	37.78	52.35	74	-21.65
13093.140	38.76	15.57	39.42	35.28	50.19	74	-23.81
15720.000	41.31	17.24	39.77	34.24	53.02	74	-20.98
17830.800	44.00	21.55	37.45	24.72	52.82	74	-21.18

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.18	50.77	74	-23.23
10480.000	37.12	13.07	37.05	34.60	47.74	74	-26.26
11823.470	38.43	14.37	38.13	37.68	52.35	74	-21.65
13804.270	38.97	16.03	40.27	36.78	51.51	74	-22.49
15720.000	41.31	17.24	39.77	34.24	53.02	74	-20.98
17830.800	44.00	21.55	37.45	25.22	53.32	74	-20.68



Mode:c; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.50	51.09	74	-22.91
10380.000	37.22	13.00	37.00	36.75	49.97	74	-24.03
11734.470	38.34	14.27	38.04	37.19	51.76	74	-22.24
13167.540	38.73	15.59	39.51	34.51	49.32	74	-24.68
15570.000	41.37	17.09	39.92	33.43	51.97	74	-22.03
17830.800	44.00	21.55	37.45	24.95	53.05	74	-20.95

Mode:c; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7664.340	36.40	10.88	37.72	40.98	50.54	74	-23.46
10380.000	37.22	13.00	37.00	36.66	49.88	74	-24.12
11734.470	38.34	14.27	38.04	36.22	50.79	74	-23.21
13830.370	39.00	16.06	40.30	36.76	51.52	74	-22.48
15570.000	41.37	17.09	39.92	34.31	52.85	74	-21.15
17830.800	44.00	21.55	37.45	24.53	52.63	74	-21.37



Mode:c; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7693.350	36.42	10.90	37.69	40.74	50.37	74	-23.63
8328.564	36.20	11.58	37.37	41.70	52.11	74	-21.89
10460.000	37.14	13.06	37.04	34.21	47.37	74	-26.63
13242.370	38.70	15.61	39.60	35.38	50.09	74	-23.91
15690.000	41.32	17.21	39.80	34.28	53.01	74	-20.99
17830.800	44.00	21.55	37.45	24.96	53.06	74	-20.94

Mode:c; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7079.786	36.47	10.63	38.32	42.81	51.59	74	-22.41
8344.312	36.18	11.61	37.36	42.29	52.72	74	-21.28
10460.000	37.14	13.06	37.04	34.77	47.93	74	-26.07
12751.430	38.85	14.86	39.06	37.51	52.16	74	-21.84
15690.000	41.32	17.21	39.80	33.97	52.70	74	-21.30
17830.800	44.00	21.55	37.45	25.24	53.34	74	-20.66



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.13	50.72	74	-23.28
9007.715	36.61	11.80	37.30	39.44	50.55	74	-23.45
10360.000	37.24	12.98	36.99	35.20	48.43	74	-25.57
12775.540	38.84	14.93	39.08	36.96	51.65	74	-22.35
15540.000	41.38	17.07	39.95	33.92	52.42	74	-21.58
17629.850	43.64	20.87	37.63	26.30	53.18	74	-20.82

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7093.172	36.46	10.64	38.30	42.28	51.08	74	-22.92
9007.715	36.61	11.80	37.30	39.84	50.95	74	-23.05
10360.000	37.24	12.98	36.99	36.42	49.65	74	-24.35
13217.380	38.71	15.61	39.57	35.55	50.30	74	-23.70
15540.000	41.38	17.07	39.95	33.34	51.84	74	-22.16
17830.800	44.00	21.55	37.45	24.82	52.92	74	-21.08



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.23	50.82	74	-23.18
10440.000	37.16	13.04	37.03	34.23	47.40	74	-26.60
11756.660	38.36	14.30	38.06	37.17	51.77	74	-22.23
13778.220	38.94	16.00	40.24	37.57	52.27	74	-21.73
15660.000	41.34	17.18	39.83	33.96	52.65	74	-21.35
17830.800	44.00	21.55	37.45	25.52	53.62	74	-20.38

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7079.786	36.47	10.63	38.32	41.68	50.46	74	-23.54
8344.312	36.18	11.61	37.36	41.52	51.95	74	-22.05
10440.000	37.16	13.04	37.03	33.25	46.42	74	-27.58
12775.540	38.84	14.93	39.08	35.69	50.38	74	-23.62
15660.000	41.34	17.18	39.83	34.00	52.69	74	-21.31
17464.130	43.36	20.30	37.78	26.97	52.85	74	-21.15



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	39.93	49.52	74	-24.48
9678.051	37.54	12.54	36.96	39.68	52.80	74	-21.20
10480.000	37.12	13.07	37.05	33.66	46.80	74	-27.20
13242.370	38.70	15.61	39.60	35.33	50.04	74	-23.96
15720.000	41.31	17.24	39.77	33.76	52.54	74	-21.46
17464.130	43.36	20.30	37.78	27.51	53.39	74	-20.61

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7160.481	36.43	10.66	38.23	39.51	48.37	74	-25.63
9007.715	36.61	11.80	37.30	38.12	49.23	74	-24.77
10480.000	37.12	13.07	37.05	33.29	46.43	74	-27.57
12775.540	38.84	14.93	39.08	35.86	50.55	74	-23.45
15720.000	41.31	17.24	39.77	32.83	51.61	74	-22.39
17530.230	43.46	20.52	37.72	27.14	53.40	74	-20.60



Mode:c; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.57	51.16	74	-22.84
10380.000	37.22	13.00	37.00	36.22	49.44	74	-24.56
11067.070	37.75	13.53	37.37	37.39	51.30	74	-22.70
12751.430	38.85	14.86	39.06	36.69	51.34	74	-22.66
15570.000	41.37	17.09	39.92	33.09	51.63	74	-22.37
17830.800	44.00	21.55	37.45	25.50	53.60	74	-20.40

Mode:c; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
9007.715	36.61	11.80	37.30	39.06	50.17	74	-23.83
10380.000	37.22	13.00	37.00	36.89	50.11	74	-23.89
11712.330	38.31	14.25	38.02	37.10	51.64	74	-22.36
13778.220	38.94	16.00	40.24	38.02	52.72	74	-21.28
15570.000	41.37	17.09	39.92	33.94	52.48	74	-21.52
17763.560	43.88	21.32	37.51	25.56	53.25	74	-20.75



Mode:c; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7093.172	36.46	10.64	38.30	41.87	50.67	74	-23.33
10460.000	37.14	13.06	37.04	34.08	47.24	74	-26.76
11734.470	38.34	14.27	38.04	37.15	51.72	74	-22.28
13217.380	38.71	15.61	39.57	34.54	49.29	74	-24.71
15690.000	41.32	17.21	39.80	33.89	52.62	74	-21.38
17797.150	43.94	21.44	37.48	25.48	53.38	74	-20.62

Mode:c; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.29	50.88	74	-23.12
10460.000	37.14	13.06	37.04	35.09	48.25	74	-25.75
11734.470	38.34	14.27	38.04	36.15	50.72	74	-23.28
13804.270	38.97	16.03	40.27	37.59	52.32	74	-21.68
15690.000	41.32	17.21	39.80	33.97	52.70	74	-21.30
17797.150	43.94	21.44	37.48	25.48	53.38	74	-20.62



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Mode:c; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:80MHz;

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7093.172	36.46	10.64	38.3	41.77	50.57	74	-23.43
8990.716	36.59	11.79	37.3	39.78	50.86	74	-23.14
10420	37.18	13.03	37.02	36.25	49.44	74	-24.56
12775.54	38.84	14.93	39.08	38.31	53.00	74	-21.00
15630	41.35	17.15	39.86	34.14	52.78	74	-21.22
17797.15	43.94	21.44	37.48	25.45	53.35	74	-20.65

Mode:c; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:80MHz;

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	40.38	49.97	74	-24.03
9659.786	37.53	12.53	36.96	39.91	53.01	74	-20.99
10420	37.18	13.03	37.02	36.47	49.66	74	-24.34
12751.43	38.85	14.86	39.06	36.72	51.37	74	-22.63
15630	41.35	17.15	39.86	34.23	52.87	74	-21.13
17830.8	44	21.55	37.45	24.67	52.77	74	-21.23



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	40.66	50.25	74	-23.75
8990.716	36.59	11.79	37.30	38.98	50.06	74	-23.94
11490.000	38.09	14.01	37.80	32.43	46.73	74	-27.27
13167.540	38.73	15.59	39.51	34.77	49.58	74	-24.42
14512.850	40.42	16.40	40.50	36.72	53.04	74	-20.96
17235.000	43.08	19.50	37.98	28.35	52.95	74	-21.05

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7079.786	36.47	10.63	38.32	41.98	50.76	74	-23.24
9007.715	36.61	11.80	37.30	39.37	50.48	74	-23.52
11490.000	38.09	14.01	37.80	34.65	48.95	74	-25.05
13882.720	39.06	16.12	40.36	36.24	51.06	74	-22.94
15800.410	41.28	17.31	39.69	33.75	52.65	74	-21.35
17235.000	43.08	19.50	37.98	28.15	52.75	74	-21.25



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7106.583	36.46	10.64	38.29	41.04	49.85	74	-24.15
8344.312	36.18	11.61	37.36	42.02	52.45	74	-21.55
11570.000	38.17	14.09	37.88	33.35	47.73	74	-26.27
12775.540	38.84	14.93	39.08	36.69	51.38	74	-22.62
14929.940	41.18	16.52	40.50	36.08	53.28	74	-20.72
17355.000	43.23	19.92	37.87	28.26	53.54	74	-20.46

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8328.564	36.20	11.58	37.37	41.47	51.88	74	-22.12
10069.670	37.53	12.76	36.84	39.61	53.06	74	-20.94
11570.000	38.17	14.09	37.88	33.53	47.91	74	-26.09
13804.270	38.97	16.03	40.27	37.42	52.15	74	-21.85
16010.720	41.23	17.50	39.49	33.44	52.68	74	-21.32
17355.000	43.23	19.92	37.87	28.03	53.31	74	-20.69



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7093.172	36.46	10.64	38.30	41.47	50.27	74	-23.73
8328.564	36.20	11.58	37.37	41.50	51.91	74	-22.09
9993.873	37.60	12.71	36.80	39.00	52.51	74	-21.49
11650.000	38.25	14.18	37.96	33.25	47.72	74	-26.28
14845.570	41.03	16.50	40.50	36.17	53.20	74	-20.80
17475.000	43.37	20.33	37.77	26.71	52.64	74	-21.36

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7093.172	36.46	10.64	38.30	40.81	49.61	74	-24.39
9659.786	37.53	12.53	36.96	39.39	52.49	74	-21.51
11650.000	38.25	14.18	37.96	32.75	47.22	74	-26.78
13830.370	39.00	16.06	40.30	35.78	50.54	74	-23.46
16040.990	41.32	17.51	39.45	33.82	53.20	74	-20.80
17475.000	43.37	20.33	37.77	27.45	53.38	74	-20.62



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	40.95	50.54	74	-23.46
9659.786	37.53	12.53	36.96	39.68	52.78	74	-21.22
11490.000	38.09	14.01	37.80	34.20	48.50	74	-25.50
13217.380	38.71	15.61	39.57	35.94	50.69	74	-23.31
14650.570	40.67	16.44	40.50	35.36	51.97	74	-22.03
17235.000	43.08	19.50	37.98	28.37	52.97	74	-21.03

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7079.786	36.47	10.63	38.32	42.55	51.33	74	-22.67
8990.716	36.59	11.79	37.30	40.22	51.30	74	-22.70
11490.000	38.09	14.01	37.80	33.54	47.84	74	-26.16
13804.270	38.97	16.03	40.27	36.50	51.23	74	-22.77
16010.720	41.23	17.50	39.49	33.80	53.04	74	-20.96
17235.000	43.08	19.50	37.98	28.46	53.06	74	-20.94



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7106.583	36.46	10.64	38.29	41.67	50.48	74	-23.52
8328.564	36.20	11.58	37.37	41.19	51.60	74	-22.40
11570.000	38.17	14.09	37.88	33.45	47.83	74	-26.17
13167.540	38.73	15.59	39.51	36.35	51.16	74	-22.84
14512.850	40.42	16.40	40.50	36.92	53.24	74	-20.76
17355.000	43.23	19.92	37.87	27.47	52.75	74	-21.25

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.10	50.69	74	-23.31
9678.051	37.54	12.54	36.96	40.43	53.55	74	-20.45
11570.000	38.17	14.09	37.88	33.81	48.19	74	-25.81
13117.890	38.75	15.58	39.45	35.77	50.65	74	-23.35
15157.260	41.33	16.70	40.34	34.80	52.49	74	-21.51
17355.000	43.23	19.92	37.87	27.87	53.15	74	-20.85



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	40.25	49.84	74	-24.16
9862.599	37.57	12.64	36.87	39.60	52.94	74	-21.06
11650.000	38.25	14.18	37.96	33.29	47.76	74	-26.24
13804.270	38.97	16.03	40.27	36.62	51.35	74	-22.65
16010.720	41.23	17.50	39.49	34.09	53.33	74	-20.67
17475.000	43.37	20.33	37.77	26.77	52.70	74	-21.30

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7086.476	36.46	10.63	38.31	41.42	50.20	74	-23.80
8344.312	36.18	11.61	37.36	41.36	51.79	74	-22.21
11650.000	38.25	14.18	37.96	33.83	48.30	74	-25.70
13093.140	38.76	15.57	39.42	35.49	50.40	74	-23.60
15800.410	41.28	17.31	39.69	33.86	52.76	74	-21.24
17475.000	43.37	20.33	37.77	27.24	53.17	74	-20.83



Mode:d; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7160.481	36.43	10.66	38.23	40.74	49.60	74	-24.40
9007.715	36.61	11.80	37.30	38.23	49.34	74	-24.66
11510.000	38.11	14.03	37.82	33.07	47.39	74	-26.61
13217.380	38.71	15.61	39.57	34.47	49.22	74	-24.78
15157.260	41.33	16.70	40.34	35.23	52.92	74	-21.08
17265.000	43.12	19.60	37.96	28.50	53.26	74	-20.74

Mode:d; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.88	51.47	74	-22.53
9993.873	37.60	12.71	36.80	38.66	52.17	74	-21.83
11510.000	38.11	14.03	37.82	33.98	48.30	74	-25.70
13217.380	38.71	15.61	39.57	35.23	49.98	74	-24.02
15417.140	41.38	16.95	40.07	35.04	53.30	74	-20.70
17265.000	43.12	19.60	37.96	28.75	53.51	74	-20.49



Mode:d; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7093.172	36.46	10.64	38.30	41.99	50.79	74	-23.21
9659.786	37.53	12.53	36.96	39.70	52.80	74	-21.20
11590.000	38.19	14.12	37.90	33.52	47.93	74	-26.07
13830.370	39.00	16.06	40.30	36.37	51.13	74	-22.87
15740.830	41.30	17.26	39.75	34.40	53.21	74	-20.79
17385.000	43.26	20.02	37.85	28.02	53.45	74	-20.55

Mode:d; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7093.172	36.46	10.64	38.30	41.02	49.82	74	-24.18
8328.564	36.20	11.58	37.37	41.09	51.50	74	-22.50
11590.000	38.19	14.12	37.90	32.87	47.28	74	-26.72
12751.430	38.85	14.86	39.06	35.52	50.17	74	-23.83
15214.630	41.34	16.75	40.28	35.22	53.03	74	-20.97
17385.000	43.26	20.02	37.85	27.95	53.38	74	-20.62



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7664.340	36.40	10.88	37.72	40.30	49.86	74	-24.14
9937.399	37.59	12.68	36.83	39.27	52.71	74	-21.29
11490.000	38.09	14.01	37.80	33.17	47.47	74	-26.53
13804.270	38.97	16.03	40.27	36.74	51.47	74	-22.53
16010.720	41.23	17.50	39.49	34.33	53.57	74	-20.43
17235.000	43.08	19.50	37.98	28.61	53.21	74	-20.79

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7093.172	36.46	10.64	38.30	41.09	49.89	74	-24.11
9007.715	36.61	11.80	37.30	38.92	50.03	74	-23.97
11490.000	38.09	14.01	37.80	32.75	47.05	74	-26.95
12775.540	38.84	14.93	39.08	35.07	49.76	74	-24.24
16010.720	41.23	17.50	39.49	32.73	51.97	74	-22.03
17235.000	43.08	19.50	37.98	28.01	52.61	74	-21.39



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.71	51.30	74	-22.70
9659.786	37.53	12.53	36.96	39.37	52.47	74	-21.53
11570.000	38.17	14.09	37.88	32.78	47.16	74	-26.84
13217.380	38.71	15.61	39.57	36.71	51.46	74	-22.54
15800.410	41.28	17.31	39.69	34.21	53.11	74	-20.89
17355.000	43.23	19.92	37.87	27.59	52.87	74	-21.13

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7120.020	36.45	10.65	38.27	41.13	49.96	74	-24.04
9007.715	36.61	11.80	37.30	38.83	49.94	74	-24.06
11570.000	38.17	14.09	37.88	32.80	47.18	74	-26.82
12751.430	38.85	14.86	39.06	35.86	50.51	74	-23.49
15830.290	41.27	17.34	39.67	33.93	52.87	74	-21.13
17355.000	43.23	19.92	37.87	27.29	52.57	74	-21.43



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7106.583	36.46	10.64	38.29	41.34	50.15	74	-23.85
8990.716	36.59	11.79	37.30	39.16	50.24	74	-23.76
11650.000	38.25	14.18	37.96	34.13	48.60	74	-25.40
13778.220	38.94	16.00	40.24	37.09	51.79	74	-22.21
16010.720	41.23	17.50	39.49	32.37	51.61	74	-22.39
17475.000	43.37	20.33	37.77	27.72	53.65	74	-20.35

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7106.583	36.46	10.64	38.29	41.94	50.75	74	-23.25
8328.564	36.20	11.58	37.37	40.53	50.94	74	-23.06
11650.000	38.25	14.18	37.96	32.54	47.01	74	-26.99
13830.370	39.00	16.06	40.30	36.98	51.74	74	-22.26
16627.150	42.73	17.87	38.68	30.88	52.80	74	-21.20
17475.000	43.37	20.33	37.77	27.40	53.33	74	-20.67



Mode:d; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.10	50.69	74	-23.31
9659.786	37.53	12.53	36.96	39.98	53.08	74	-20.92
11510.000	38.11	14.03	37.82	34.22	48.54	74	-25.46
12751.430	38.85	14.86	39.06	35.73	50.38	74	-23.62
14485.460	40.37	16.39	40.50	36.37	52.63	74	-21.37
17265.000	43.12	19.60	37.96	28.62	53.38	74	-20.62

Mode:d; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7019.862	36.49	10.61	38.38	41.82	50.54	74	-23.46
8344.312	36.18	11.61	37.36	41.89	52.32	74	-21.68
11510.000	38.11	14.03	37.82	33.70	48.02	74	-25.98
14567.780	40.52	16.42	40.50	36.34	52.78	74	-21.22
16223.830	41.88	17.54	39.20	32.50	52.72	74	-21.28
17265.000	43.12	19.60	37.96	28.59	53.35	74	-20.65



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Mode:d; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7664.340	36.40	10.88	37.72	40.29	49.85	74	-24.15
9659.786	37.53	12.53	36.96	39.70	52.80	74	-21.20
11590.000	38.19	14.12	37.90	32.96	47.37	74	-26.63
13778.220	38.94	16.00	40.24	37.13	51.83	74	-22.17
16040.990	41.32	17.51	39.45	33.50	52.88	74	-21.12
17385.000	43.26	20.02	37.85	27.33	52.76	74	-21.24

Mode:d; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7678.832	36.41	10.89	37.71	41.16	50.75	74	-23.25
9881.246	37.58	12.65	36.86	39.68	53.05	74	-20.95
11590.000	38.19	14.12	37.90	33.91	48.32	74	-25.68
12775.540	38.84	14.93	39.08	35.65	50.34	74	-23.66
14512.850	40.42	16.40	40.50	36.43	52.75	74	-21.25
17385.000	43.26	20.02	37.85	27.64	53.07	74	-20.93



Mode:d; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:80MHz;

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7106.583	36.46	10.64	38.29	41.36	50.17	74	-23.83
9007.715	36.61	11.8	37.3	38.81	49.92	74	-24.08
11550	38.15	14.07	37.86	34.85	49.21	74	-24.79
13192.44	38.72	15.6	39.54	35.97	50.75	74	-23.25
14929.94	41.18	16.52	40.5	35.92	53.12	74	-20.88
17325	43.19	19.81	37.9	26.54	51.64	74	-22.36

Mode:d; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:80MHz;

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7664.34	36.4	10.88	37.72	41.74	51.3	74	-22.7
8990.716	36.59	11.79	37.3	39.03	50.11	74	-23.89
11550	38.15	14.07	37.86	35.11	49.47	74	-24.53
13117.89	38.75	15.58	39.45	36.17	51.05	74	-22.95
14929.94	41.18	16.52	40.5	35.98	53.18	74	-20.82
17325	43.19	19.81	37.9	27.51	52.61	74	-21.39



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8535.612	36.04	11.85	35.86	36.96	48.99	74	-25.01
10360.000	37.24	12.98	35.08	34.82	49.96	74	-24.04
12094.530	38.66	14.48	35.83	34.26	51.57	74	-22.43
14054.220	39.33	16.27	38.99	34.70	51.31	74	-22.69
15540.000	41.38	17.07	38.31	32.62	52.76	74	-21.24
17813.960	43.97	21.49	35.89	23.93	53.50	74	-20.50

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8914.617	36.50	11.80	35.49	34.45	47.26	74	-26.74
10360.000	37.24	12.98	35.08	34.22	49.36	74	-24.64
11845.820	38.45	14.40	35.57	32.83	50.11	74	-23.89
13804.270	38.97	16.03	38.80	35.05	51.25	74	-22.75
15540.000	41.38	17.07	38.31	32.05	52.19	74	-21.81
17629.850	43.64	20.87	35.99	25.25	53.77	74	-20.23



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8714.822	36.26	11.82	37.33	37.04	47.79	74	-26.21
10440.000	37.16	13.04	37.03	35.14	48.31	74	-25.69
12267.090	38.76	14.34	38.58	35.89	50.41	74	-23.59
14187.590	39.66	16.31	40.50	36.18	51.65	74	-22.35
15660.000	41.34	17.18	39.83	33.75	52.44	74	-21.56
17596.580	43.58	20.75	37.66	26.48	53.15	74	-20.85

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8690.164	36.23	11.83	37.33	36.41	47.14	74	-26.86
10440.000	37.16	13.04	37.03	34.86	48.03	74	-25.97
12083.110	38.65	14.49	38.39	35.77	50.52	74	-23.48
14254.740	39.82	16.33	40.50	36.12	51.77	74	-22.23
15660.000	41.34	17.18	39.83	34.27	52.96	74	-21.04
17780.350	43.91	21.38	37.49	25.86	53.66	74	-20.34



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8756.073	36.31	11.82	37.32	36.33	47.14	74	-26.86
10480.000	37.12	13.07	37.05	35.86	49.00	74	-25.00
12151.780	38.69	14.43	38.46	35.43	50.09	74	-23.91
14067.500	39.36	16.27	40.50	36.62	51.75	74	-22.25
15720.000	41.31	17.24	39.77	33.48	52.26	74	-21.74
17746.790	43.85	21.26	37.52	26.30	53.89	74	-20.11

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8897.794	36.48	11.80	37.31	37.01	47.98	74	-26.02
10480.000	37.12	13.07	37.05	35.76	48.90	74	-25.10
12209.300	38.73	14.39	38.52	36.10	50.70	74	-23.30
14027.700	39.27	16.26	40.50	36.16	51.19	74	-22.81
15720.000	41.31	17.24	39.77	33.76	52.54	74	-21.46
17780.350	43.91	21.38	37.49	25.49	53.29	74	-20.71



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8095.896	36.48	11.22	36.30	37.15	48.55	74	-25.45
10360.000	37.24	12.98	35.08	35.27	50.41	74	-23.59
11756.660	38.36	14.30	35.55	33.73	50.84	74	-23.16
13648.700	38.78	15.85	38.65	35.09	51.07	74	-22.93
15540.000	41.38	17.07	38.31	32.53	52.67	74	-21.33
17797.150	43.94	21.44	35.90	24.09	53.57	74	-20.43

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8511.462	36.01	11.85	35.89	36.66	48.63	74	-25.37
10360.000	37.24	12.98	35.08	34.98	50.12	74	-23.88
11969.530	38.57	14.53	35.59	33.89	51.40	74	-22.60
13674.510	38.81	15.88	38.67	35.42	51.44	74	-22.56
15540.000	41.38	17.07	38.31	31.98	52.12	74	-21.88
17613.210	43.61	20.81	35.99	25.05	53.48	74	-20.52



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8503.427	36.00	11.85	37.35	37.58	48.08	74	-25.92
10440.000	37.16	13.04	37.03	34.98	48.15	74	-25.85
12232.380	38.74	14.37	38.54	36.20	50.77	74	-23.23
14214.410	39.72	16.31	40.50	36.27	51.80	74	-22.20
15660.000	41.34	17.18	39.83	33.92	52.61	74	-21.39
17763.560	43.88	21.32	37.51	25.94	53.63	74	-20.37

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8681.961	36.22	11.83	37.33	38.07	48.79	74	-25.21
10440.000	37.16	13.04	37.03	36.37	49.54	74	-24.46
12094.530	38.66	14.48	38.40	37.04	51.78	74	-22.22
13765.210	38.92	15.98	40.23	36.66	51.33	74	-22.67
15660.000	41.34	17.18	39.83	33.61	52.30	74	-21.70
17696.580	43.76	21.09	37.57	26.56	53.84	74	-20.16



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8463.365	36.04	11.79	37.35	38.24	48.72	74	-25.28
10480.000	37.12	13.07	37.05	36.90	50.04	74	-23.96
12163.260	38.70	14.42	38.47	35.40	50.05	74	-23.95
13804.270	38.97	16.03	40.27	36.88	51.61	74	-22.39
15720.000	41.31	17.24	39.77	33.96	52.74	74	-21.26
17830.800	44.00	21.55	37.45	25.40	53.50	74	-20.50

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8519.504	36.02	11.85	37.35	37.81	48.33	74	-25.67
10480.000	37.12	13.07	37.05	36.43	49.57	74	-24.43
12313.520	38.79	14.30	38.62	35.75	50.22	74	-23.78
14001.230	39.20	16.25	40.50	36.15	51.10	74	-22.90
15720.000	41.31	17.24	39.77	33.26	52.04	74	-21.96
17780.350	43.91	21.38	37.49	25.42	53.22	74	-20.78



Mode:f; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8527.555	36.03	11.85	35.87	35.59	47.60	74	-26.40
10380.000	37.22	13.00	35.09	33.23	48.36	74	-25.64
12037.550	38.62	14.53	35.69	32.97	50.43	74	-23.57
13830.370	39.00	16.06	38.83	34.90	51.13	74	-22.87
15570.000	41.37	17.09	38.27	32.61	52.80	74	-21.20
17780.350	43.91	21.38	35.91	24.34	53.72	74	-20.28

Mode:f; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8519.504	36.02	11.85	35.88	36.19	48.18	74	-25.82
10380.000	37.22	13.00	35.09	35.49	50.62	74	-23.38
12003.490	38.60	14.56	35.61	34.42	51.97	74	-22.03
13882.720	39.06	16.12	38.88	35.38	51.68	74	-22.32
15570.000	41.37	17.09	38.27	32.72	52.91	74	-21.09
17763.560	43.88	21.32	35.92	24.24	53.52	74	-20.48



Mode:f; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8180.443	36.38	11.35	37.38	38.37	48.72	74	-25.28
10460.000	37.14	13.06	37.04	36.06	49.22	74	-24.78
12278.680	38.77	14.33	38.59	35.68	50.19	74	-23.81
14067.500	39.36	16.27	40.50	36.45	51.58	74	-22.42
15570.000	41.37	17.09	39.92	33.84	52.38	74	-21.62
17730.040	43.82	21.21	37.54	26.45	53.94	74	-20.06

Mode:f; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8690.164	36.23	11.83	37.33	38.06	48.79	74	-25.21
10460.000	37.14	13.06	37.04	36.75	49.91	74	-24.09
12174.760	38.71	14.41	38.48	35.84	50.48	74	-23.52
14174.190	39.62	16.30	40.50	36.22	51.64	74	-22.36
15690.000	41.32	17.21	39.80	33.60	52.33	74	-21.67
17797.150	43.94	21.44	37.48	25.48	53.38	74	-20.62



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7974.475	36.59	11.05	36.42	37.60	48.82	74	-25.18
9118.993	36.82	11.95	35.34	36.33	49.76	74	-24.24
10360.000	37.24	12.98	35.08	35.64	50.78	74	-23.22
12679.370	38.86	14.66	37.23	35.11	51.40	74	-22.60
15540.000	41.38	17.07	38.31	32.77	52.91	74	-21.09
17780.350	43.91	21.38	35.91	24.62	54.00	74	-20.00

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8543.678	36.05	11.84	35.86	36.28	48.31	74	-25.69
10360.000	37.24	12.98	35.08	34.56	49.70	74	-24.30
11790.010	38.39	14.33	35.56	32.85	50.01	74	-23.99
13622.950	38.75	15.82	38.62	35.62	51.57	74	-22.43
15540.000	41.38	17.07	38.31	32.51	52.65	74	-21.35
17398.280	43.28	20.07	36.10	25.98	53.23	74	-20.77



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8527.555	36.03	11.85	37.35	37.32	47.85	74	-26.15
10440.000	37.16	13.04	37.03	37.45	50.62	74	-23.38
11734.470	38.34	14.27	38.04	36.76	51.33	74	-22.67
13648.700	38.78	15.85	40.09	36.52	51.06	74	-22.94
15660.000	41.34	17.18	39.83	33.75	52.44	74	-21.56
17730.040	43.82	21.21	37.54	25.79	53.28	74	-20.72

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8576.016	36.09	11.84	37.34	37.47	48.06	74	-25.94
10440.000	37.16	13.04	37.03	36.65	49.82	74	-24.18
11778.880	38.38	14.32	38.09	36.01	50.62	74	-23.38
13648.700	38.78	15.85	40.09	37.07	51.61	74	-22.39
15660.000	41.34	17.18	39.83	33.55	52.24	74	-21.76
17780.350	43.91	21.38	37.49	25.36	53.16	74	-20.84



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8559.831	36.07	11.84	37.34	37.82	48.39	74	-25.61
10480.000	37.12	13.07	37.05	37.71	50.85	74	-23.15
12003.490	38.60	14.56	38.30	35.47	50.33	74	-23.67
13908.970	39.09	16.15	40.39	36.53	51.38	74	-22.62
15720.000	41.31	17.24	39.77	33.93	52.71	74	-21.29
17780.350	43.91	21.38	37.49	25.56	53.36	74	-20.64

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8479.367	36.02	11.82	37.35	37.20	47.69	74	-26.31
10480.000	37.12	13.07	37.05	36.81	49.95	74	-24.05
12151.780	38.69	14.43	38.46	36.19	50.85	74	-23.15
14067.500	39.36	16.27	40.50	36.68	51.81	74	-22.19
15720.000	41.31	17.24	39.77	33.91	52.69	74	-21.31
17830.800	44.00	21.55	37.45	25.06	53.16	74	-20.84



Mode:f; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8328.564	36.20	11.58	36.07	36.49	48.20	74	-25.80
10380.000	37.22	13.00	35.09	35.27	50.40	74	-23.60
11690.220	38.29	14.23	35.54	34.18	51.16	74	-22.84
13456.710	38.62	15.67	38.46	35.60	51.43	74	-22.57
15570.000	41.37	17.09	38.27	31.92	52.11	74	-21.89
17746.790	43.85	21.26	35.93	24.70	53.88	74	-20.12

Mode:f; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8463.365	36.04	11.79	35.94	36.42	48.31	74	-25.69
10380.000	37.22	13.00	35.09	34.30	49.43	74	-24.57
11834.640	38.44	14.38	35.57	33.26	50.51	74	-23.49
13648.700	38.78	15.85	38.65	35.32	51.30	74	-22.70
15570.000	41.37	17.09	38.27	32.17	52.36	74	-21.64
17763.560	43.88	21.32	35.92	24.55	53.83	74	-20.17



Mode:f; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8511.462	36.01	11.85	37.35	38.40	48.91	74	-25.09
10460.000	37.14	13.06	37.04	37.01	50.17	74	-23.83
12117.400	38.67	14.46	38.42	36.79	51.50	74	-22.50
13817.310	38.98	16.04	40.29	36.57	51.30	74	-22.70
15690.000	41.32	17.21	39.80	33.54	52.27	74	-21.73
17932.130	44.18	21.89	37.36	25.05	53.76	74	-20.24

Mode:f; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8487.380	36.01	11.83	37.35	37.94	48.43	74	-25.57
10460.000	37.14	13.06	37.04	36.98	50.14	74	-23.86
12026.190	38.62	14.54	38.33	35.99	50.82	74	-23.18
13922.110	39.11	16.16	40.41	36.91	51.77	74	-22.23
15690.000	41.32	17.21	39.80	33.31	52.04	74	-21.96
17746.790	43.85	21.26	37.52	26.33	53.92	74	-20.08



Mode:f; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:80MHz;

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8503.427	36	11.85	35.9	36.44	48.39	74	-25.61
10420	37.18	13.03	35.11	34.28	49.38	74	-24.62
12048.93	38.63	14.52	35.72	33.88	51.31	74	-22.69
13778.22	38.94	16	38.78	35.29	51.45	74	-22.55
15630	41.35	17.15	38.21	32.08	52.37	74	-21.63
17696.58	43.76	21.09	35.95	24.33	53.23	74	-20.77

Mode:f; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:80MHz;

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8973.749	36.57	11.79	35.43	35.37	48.3	74	-25.7
10420	37.18	13.03	35.11	34.47	49.57	74	-24.43
12151.78	38.69	14.43	35.96	34.13	51.29	74	-22.71
13830.37	39	16.06	38.83	35.37	51.6	74	-22.4
15630	41.35	17.15	38.21	32.46	52.75	74	-21.25
17365.44	43.24	19.95	36.12	26.48	53.55	74	-20.45



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8511.462	36.01	11.85	37.35	37.43	47.94	74	-26.06
10031.700	37.57	12.73	36.82	35.15	48.63	74	-25.37
11490.000	38.09	14.01	37.80	35.93	50.23	74	-23.77
13279.950	38.69	15.62	39.64	37.13	51.80	74	-22.20
15402.590	41.38	16.93	40.09	34.28	52.50	74	-21.50
17235.000	43.08	19.50	37.98	28.85	53.45	74	-20.55

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8375.895	36.15	11.66	37.36	36.70	47.15	74	-26.85
9687.195	37.54	12.54	36.95	34.90	48.03	74	-25.97
11490.000	38.09	14.01	37.80	36.17	50.47	74	-23.53
13405.960	38.64	15.66	39.80	36.93	51.43	74	-22.57
15460.890	41.39	16.99	40.03	34.06	52.41	74	-21.59
17235.000	43.08	19.50	37.98	28.98	53.58	74	-20.42



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8157.297	36.41	11.31	37.38	36.82	47.16	74	-26.84
9623.362	37.53	12.51	36.98	35.02	48.08	74	-25.92
11570.000	38.17	14.09	37.88	34.95	49.33	74	-24.67
13648.700	38.78	15.85	40.09	36.92	51.46	74	-22.54
15578.150	41.37	17.10	39.91	34.16	52.72	74	-21.28
17355.000	43.23	19.92	37.87	28.39	53.67	74	-20.33

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8527.555	36.03	11.85	37.35	38.05	48.58	74	-25.42
10012.770	37.59	12.72	36.81	36.40	49.90	74	-24.10
11570.000	38.17	14.09	37.88	34.69	49.07	74	-24.93
13843.440	39.01	16.07	40.32	36.81	51.57	74	-22.43
15920.250	41.23	17.43	39.58	33.37	52.45	74	-21.55
17355.000	43.23	19.92	37.87	27.87	53.15	74	-20.85



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7936.906	36.56	11.03	36.46	37.44	48.57	74	-25.43
9899.929	37.58	12.66	34.95	36.23	51.52	74	-22.48
11650.000	38.25	14.18	35.53	32.59	49.49	74	-24.51
13635.820	38.77	15.84	38.64	35.96	51.93	74	-22.07
15431.710	41.39	16.96	38.43	32.62	52.54	74	-21.46
17475.000	43.37	20.33	36.06	25.66	53.30	74	-20.70

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7429.148	36.33	10.76	36.91	37.40	47.58	74	-26.42
8897.794	36.48	11.80	35.50	37.22	50.00	74	-24.00
10222.990	37.37	12.88	35.01	34.17	49.41	74	-24.59
11650.000	38.25	14.18	35.53	34.42	51.32	74	-22.68
14664.410	40.70	16.44	38.93	34.05	52.26	74	-21.74
17475.000	43.37	20.33	36.06	25.82	53.46	74	-20.54



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8375.895	36.15	11.66	37.36	37.64	48.09	74	-25.91
9751.452	37.55	12.58	36.92	36.18	49.39	74	-24.61
11490.000	38.09	14.01	37.80	35.90	50.20	74	-23.80
13229.870	38.71	15.61	39.58	37.04	51.78	74	-22.22
15402.590	41.38	16.93	40.09	34.54	52.76	74	-21.24
17235.000	43.08	19.50	37.98	29.40	54.00	74	-20.00

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7966.947	36.58	11.04	37.43	37.97	48.16	74	-25.84
9550.925	37.51	12.47	37.02	36.65	49.61	74	-24.39
11490.000	38.09	14.01	37.80	36.18	50.48	74	-23.52
13431.310	38.63	15.66	39.83	37.42	51.88	74	-22.12
15344.510	41.37	16.88	40.15	34.79	52.89	74	-21.11
17235.000	43.08	19.50	37.98	28.83	53.43	74	-20.57



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8328.564	36.20	11.58	37.37	37.77	48.18	74	-25.82
9596.134	37.52	12.49	37.00	36.20	49.21	74	-24.79
11570.000	38.17	14.09	37.88	34.93	49.31	74	-24.69
13142.690	38.74	15.59	39.48	36.08	50.93	74	-23.07
15431.710	41.39	16.96	40.06	33.83	52.12	74	-21.88
17355.000	43.23	19.92	37.87	28.22	53.50	74	-20.50

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8344.312	36.18	11.61	37.36	37.72	48.15	74	-25.85
10003.320	37.60	12.71	36.80	35.85	49.36	74	-24.64
11570.000	38.17	14.09	37.88	35.65	50.03	74	-23.97
13687.430	38.83	15.90	40.13	36.67	51.27	74	-22.73
15504.760	41.40	17.03	39.99	33.91	52.35	74	-21.65
17355.000	43.23	19.92	37.87	28.19	53.47	74	-20.53



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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8519.504	36.02	11.85	35.88	36.03	48.02	74	-25.98
9928.019	37.59	12.67	34.94	34.30	49.62	74	-24.38
11650.000	38.25	14.18	35.53	34.93	51.83	74	-22.17
13648.700	38.78	15.85	38.65	35.52	51.50	74	-22.50
15755.710	41.30	17.27	38.07	31.95	52.45	74	-21.55
17475.000	43.37	20.33	36.06	25.68	53.32	74	-20.68

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

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8203.654	36.35	11.39	36.20	36.80	48.34	74	-25.66
9632.455	37.53	12.51	35.08	34.45	49.41	74	-24.59
11650.000	38.25	14.18	35.53	34.47	51.37	74	-22.63
13713.310	38.86	15.93	38.71	35.64	51.72	74	-22.28
15563.440	41.37	17.09	38.28	32.82	53.00	74	-21.00
17475.000	43.37	20.33	36.06	25.57	53.21	74	-20.79



Mode:g; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8111.203	36.46	11.24	37.39	37.30	47.61	74	-26.39
9479.033	37.46	12.41	37.05	36.87	49.69	74	-24.31
11510.000	38.11	14.03	37.82	36.34	50.66	74	-23.34
13204.910	38.72	15.60	39.55	36.88	51.65	74	-22.35
15243.400	41.35	16.78	40.25	35.10	52.98	74	-21.02
17265.000	43.12	19.60	37.96	29.10	53.86	74	-20.14

Mode:g; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8195.910	36.36	11.38	37.38	37.17	47.53	74	-26.47
9623.362	37.53	12.51	36.98	35.92	48.98	74	-25.02
11510.000	38.11	14.03	37.82	35.80	50.12	74	-23.88
13080.780	38.77	15.57	39.40	37.04	51.98	74	-22.02
15100.110	41.32	16.64	40.40	34.89	52.45	74	-21.55
17265.000	43.12	19.60	37.96	28.73	53.49	74	-20.51



Mode:g; Polarization:Horizontal; Modulation Type:802.11n; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8471.363	36.03	11.81	35.93	36.39	48.30	74	-25.70
10136.460	37.46	12.82	34.97	34.38	49.69	74	-24.31
11590.000	38.19	14.12	35.52	34.14	50.93	74	-23.07
13622.950	38.75	15.82	38.62	35.95	51.90	74	-22.10
15446.290	41.39	16.98	38.41	32.05	52.01	74	-21.99
17385.000	43.26	20.02	36.11	25.85	53.02	74	-20.98

Mode:g; Polarization:Vertical; Modulation Type:802.11n; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8519.504	36.02	11.85	35.88	35.96	47.95	74	-26.05
9899.929	37.58	12.66	34.95	33.95	49.24	74	-24.76
11590.000	38.19	14.12	35.52	34.47	51.26	74	-22.74
13142.690	38.74	15.59	38.14	35.39	51.58	74	-22.42
15272.220	41.35	16.81	38.60	33.36	52.92	74	-21.08
17385.000	43.26	20.02	36.11	25.85	53.02	74	-20.98



Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:20MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8134.217	36.44	11.28	37.39	37.03	47.36	74	-26.64
9514.911	37.50	12.45	37.04	36.55	49.46	74	-24.54
11490.000	38.09	14.01	37.80	36.90	51.20	74	-22.80
13217.380	38.71	15.61	39.57	37.30	52.05	74	-21.95
14958.170	41.23	16.53	40.50	35.56	52.82	74	-21.18
17235.000	43.08	19.50	37.98	28.82	53.42	74	-20.58

Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:20MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8157.297	36.41	11.31	37.38	37.79	48.13	74	-25.87
9550.925	37.51	12.47	37.02	36.57	49.53	74	-24.47
11490.000	38.09	14.01	37.80	36.09	50.39	74	-23.61
13267.410	38.69	15.62	39.63	36.40	51.08	74	-22.92
15243.400	41.35	16.78	40.25	34.70	52.58	74	-21.42
17235.000	43.08	19.50	37.98	28.65	53.25	74	-20.75



Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:20MHz; Channel:middle

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7892.057	36.54	11.00	37.50	37.82	47.86	74	-26.14
9632.455	37.53	12.51	36.98	36.31	49.37	74	-24.63
11570.000	38.17	14.09	37.88	36.50	50.88	74	-23.12
13117.890	38.75	15.58	39.45	36.58	51.46	74	-22.54
15417.140	41.38	16.95	40.07	34.16	52.42	74	-21.58
17355.000	43.23	19.92	37.87	27.73	53.01	74	-20.99

Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:20MHz; Channel:middle

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7899.514	36.54	11.01	37.49	37.94	48.00	74	-26.00
9452.214	37.42	12.38	37.07	36.38	49.11	74	-24.89
11570.000	38.17	14.09	37.88	36.73	51.11	74	-22.89
13043.770	38.78	15.56	39.35	36.50	51.49	74	-22.51
15171.580	41.33	16.71	40.32	34.55	52.27	74	-21.73
17355.000	43.23	19.92	37.87	27.84	53.12	74	-20.88



Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:20MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7982.010	36.59	11.05	36.42	36.53	47.75	74	-26.25
9452.214	37.42	12.38	35.17	35.12	49.75	74	-24.25
11650.000	38.25	14.18	35.53	34.89	51.79	74	-22.21
14067.500	39.36	16.27	38.99	35.27	51.91	74	-22.09
15504.760	41.40	17.03	38.34	32.16	52.25	74	-21.75
17475.000	43.37	20.33	36.06	25.69	53.33	74	-20.67

Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:20MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8511.462	36.01	11.85	35.89	36.04	48.01	74	-25.99
9937.399	37.59	12.68	34.93	35.10	50.44	74	-23.56
11650.000	38.25	14.18	35.53	34.12	51.02	74	-22.98
13622.950	38.75	15.82	38.62	35.11	51.06	74	-22.94
15460.890	41.39	16.99	38.39	32.39	52.38	74	-21.62
17475.000	43.37	20.33	36.06	25.54	53.18	74	-20.82



Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8019.793	36.58	11.09	37.40	37.82	48.09	74	-25.91
9461.145	37.43	12.39	37.06	36.38	49.14	74	-24.86
11510.000	38.11	14.03	37.82	36.51	50.83	74	-23.17
13217.380	38.71	15.61	39.57	36.27	51.02	74	-22.98
15185.920	41.34	16.72	40.31	34.27	52.02	74	-21.98
17265.000	43.12	19.60	37.96	28.80	53.56	74	-20.44

Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:Low

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8352.195	36.17	11.62	37.36	36.98	47.41	74	-26.59
9650.668	37.53	12.52	36.97	35.70	48.78	74	-25.22
11510.000	38.11	14.03	37.82	35.97	50.29	74	-23.71
13142.690	38.74	15.59	39.48	36.45	51.30	74	-22.70
15214.630	41.34	16.75	40.28	34.64	52.45	74	-21.55
17265.000	43.12	19.60	37.96	28.87	53.63	74	-20.37



Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8423.493	36.09	11.73	35.98	36.30	48.14	74	-25.86
9993.873	37.60	12.71	34.90	35.39	50.80	74	-23.20
11590.000	38.19	14.12	35.52	33.99	50.78	74	-23.22
13229.870	38.71	15.61	38.23	35.47	51.56	74	-22.44
15402.590	41.38	16.93	38.46	33.08	52.93	74	-21.07
17385.000	43.26	20.02	36.11	26.30	53.47	74	-20.53

Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:40MHz; Channel:High

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8118.867	36.45	11.25	36.28	36.74	48.16	74	-25.84
9587.075	37.52	12.49	35.11	34.71	49.61	74	-24.39
11590.000	38.19	14.12	35.52	34.06	50.85	74	-23.15
13405.960	38.64	15.66	38.41	35.19	51.08	74	-22.92
15388.050	41.38	16.92	38.47	33.14	52.97	74	-21.03
17385.000	43.26	20.02	36.11	26.28	53.45	74	-20.55



Mode:g; Polarization:Horizontal; Modulation Type:802.11ac; bandwidth:80MHz;

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
7847.461	36.51	10.98	36.54	37.75	48.7	74	-25.3
9470.085	37.45	12.4	35.16	35.7	50.39	74	-23.61
11550	38.15	14.07	35.51	34.92	51.63	74	-22.37
13482.15	38.61	15.68	38.48	36.11	51.92	74	-22.08
15286.65	41.36	16.82	38.58	33.01	52.61	74	-21.39
17325	43.19	19.81	36.14	27.01	53.87	74	-20.13

Mode:g; Polarization:Vertical; Modulation Type:802.11ac; bandwidth:80MHz;

Frequency (MHz)	Antenna factors (dB/m)	Cable Loss (dB)	Preamp Gain (dB)	Reading Level (dBmV)	Level (dBmV/m)	Limit (dBmV/m)	Over limit (dB)
8141.904	36.43	11.29	36.26	37.11	48.57	74	-25.43
9641.558	37.53	12.52	35.08	35.07	50.04	74	-23.96
11550	38.15	14.07	35.51	33.63	50.34	74	-23.66
13393.31	38.64	15.65	38.39	35.63	51.53	74	-22.47
15475.5	41.4	17	38.38	32.64	52.66	74	-21.34
17325	43.19	19.81	36.14	26.15	53.01	74	-20.99



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As the worst case are 5180MHz of 802.11n(20) for 5G WIFI, 2412MHz of 802.11b for 2.4G WIFI, 2442MHz of GFSK of BT, 2480MHz of BLE and 2412MHz of 2.4G propriety.so simultaneous transmission operations under the worst case of BT, BLE, 2.4G propriety and 2.4G & 5G WIFI were recorded in the below table.

Test mode:		BT, BLE, 2.4G propriety and 2.4G & 5G WIFI		Frequency(MHz):		5180 & 2412 2442 & 2480		Remark:	Peak
Frequency (MHz)	Antenna Factor (dB/m)	Cable Loss (dB)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
7093.172	35.49	10.64	37.69	43.05	51.49	74	-22.51	Vertical	
8990.716	37.00	11.79	37.19	39.43	51.03	74	-22.97	Vertical	
11650.000	37.50	14.18	36.83	33.46	48.31	74	-25.69	Vertical	
13192.440	38.29	15.60	38.42	36.8	52.27	74	-21.73	Vertical	
15157.260	40.66	16.70	39.53	35.49	53.32	74	-20.68	Vertical	
17475.000	43.45	20.33	36.99	26.81	53.6	74	-20.40	Vertical	
7678.832	36.04	10.89	37.44	42.34	51.83	74	-22.17	Horizontal	
8990.716	37.00	11.79	37.19	39.57	51.17	74	-22.83	Horizontal	
11650.000	37.50	14.18	36.83	35.6	50.45	74	-23.55	Horizontal	
13192.440	38.29	15.60	38.42	36.84	52.31	74	-21.69	Horizontal	
15800.410	41.20	17.31	38.51	32.51	52.51	74	-21.49	Horizontal	
17475.000	43.45	20.33	36.99	27.15	53.94	74	-20.06	Horizontal	

Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level =Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor

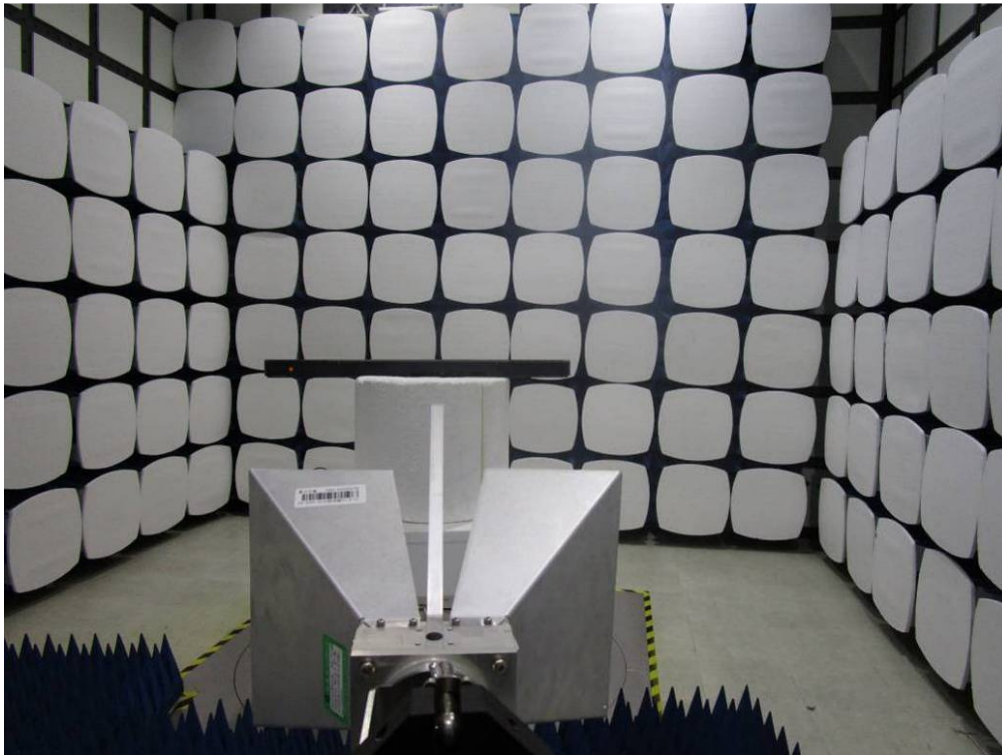
- 2) Scan from 9kHz to 25GHz,The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported .
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

8 Photographs

8.1 Conducted Disturbance at AC Power Line(150kHz-30MHz) Test Setup



8.2 Radiated Emissions Test Setup





8.3 EUT Constructional Details

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1702000699CR.



9 Appendix

9.1 Appendix 15.247

9.1.1 CDW-B18821A-00 5G 15.407

1. 26 and 6 Emission Bandwidth Measurement

Test Mode	Test Channel	Ant	EBW[MHz]	Limit[MHz]	Verdict
11A	5180	Ant1	21.960	---	PASS
11A	5200	Ant1	21.990	---	PASS
11A	5240	Ant1	22.200	---	PASS
11A	5745	Ant1	16.560	≥ 0.5	PASS
11A	5785	Ant1	16.560	≥ 0.5	PASS
11A	5825	Ant1	16.590	≥ 0.5	PASS
11AC20	5180	Ant1	22.110	---	PASS
11AC20	5200	Ant1	22.140	---	PASS
11AC20	5240	Ant1	22.140	---	PASS
11AC20	5745	Ant1	17.760	≥ 0.5	PASS
11AC20	5785	Ant1	17.790	≥ 0.5	PASS
11AC20	5825	Ant1	17.820	≥ 0.5	PASS
11AC40	5190	Ant1	43.920	---	PASS
11AC40	5230	Ant1	43.860	---	PASS
11AC40	5755	Ant1	36.420	≥ 0.5	PASS
11AC40	5795	Ant1	36.480	≥ 0.5	PASS
11AC80	5210	Ant1	81.840	---	PASS
11AC80	5775	Ant1	74.760	≥ 0.5	PASS
11N20	5180	Ant1	21.900	---	PASS
11N20	5200	Ant1	21.840	---	PASS
11N20	5240	Ant1	21.930	---	PASS
11N20	5745	Ant1	17.700	≥ 0.5	PASS
11N20	5785	Ant1	17.760	≥ 0.5	PASS
11N20	5825	Ant1	17.760	≥ 0.5	PASS

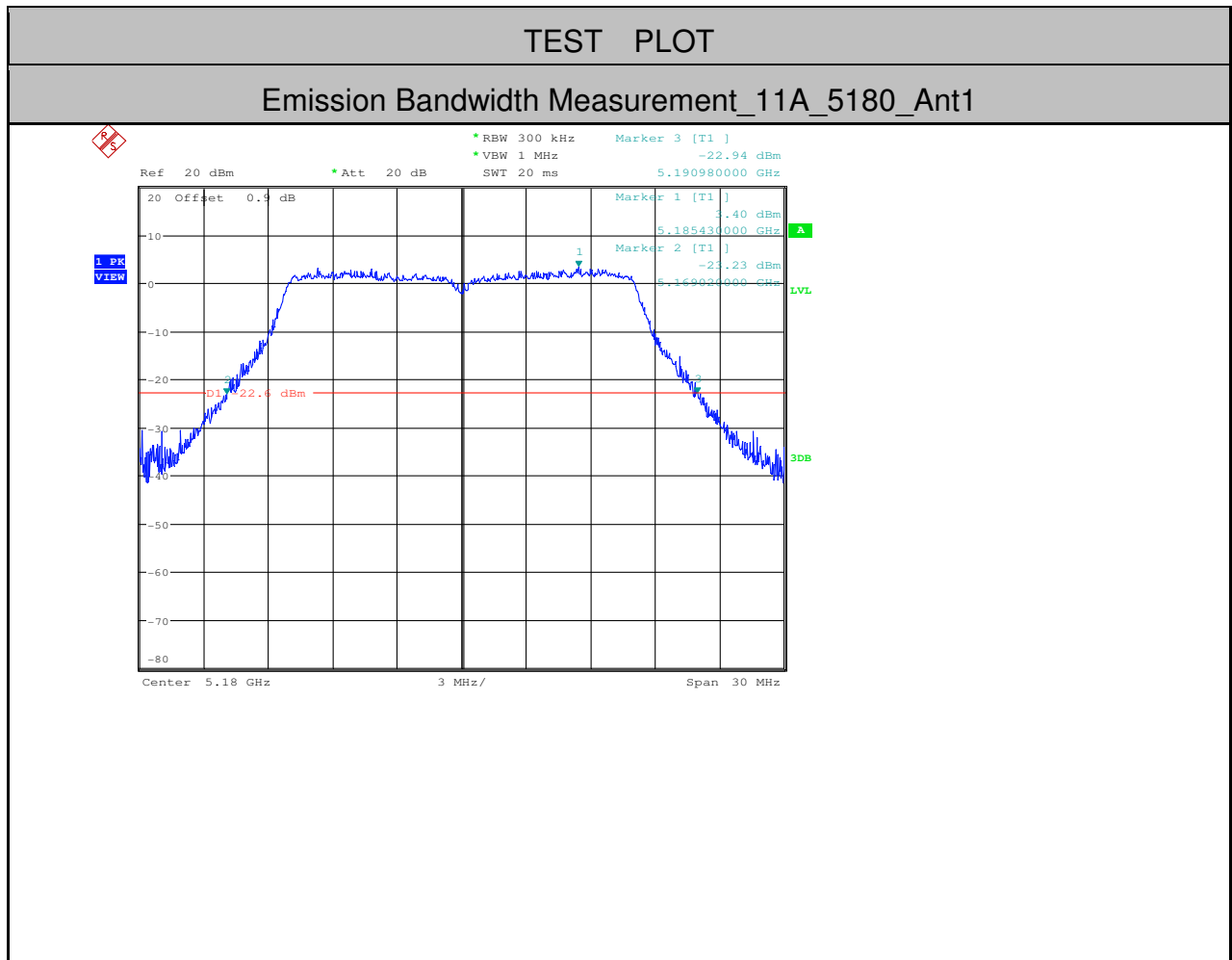


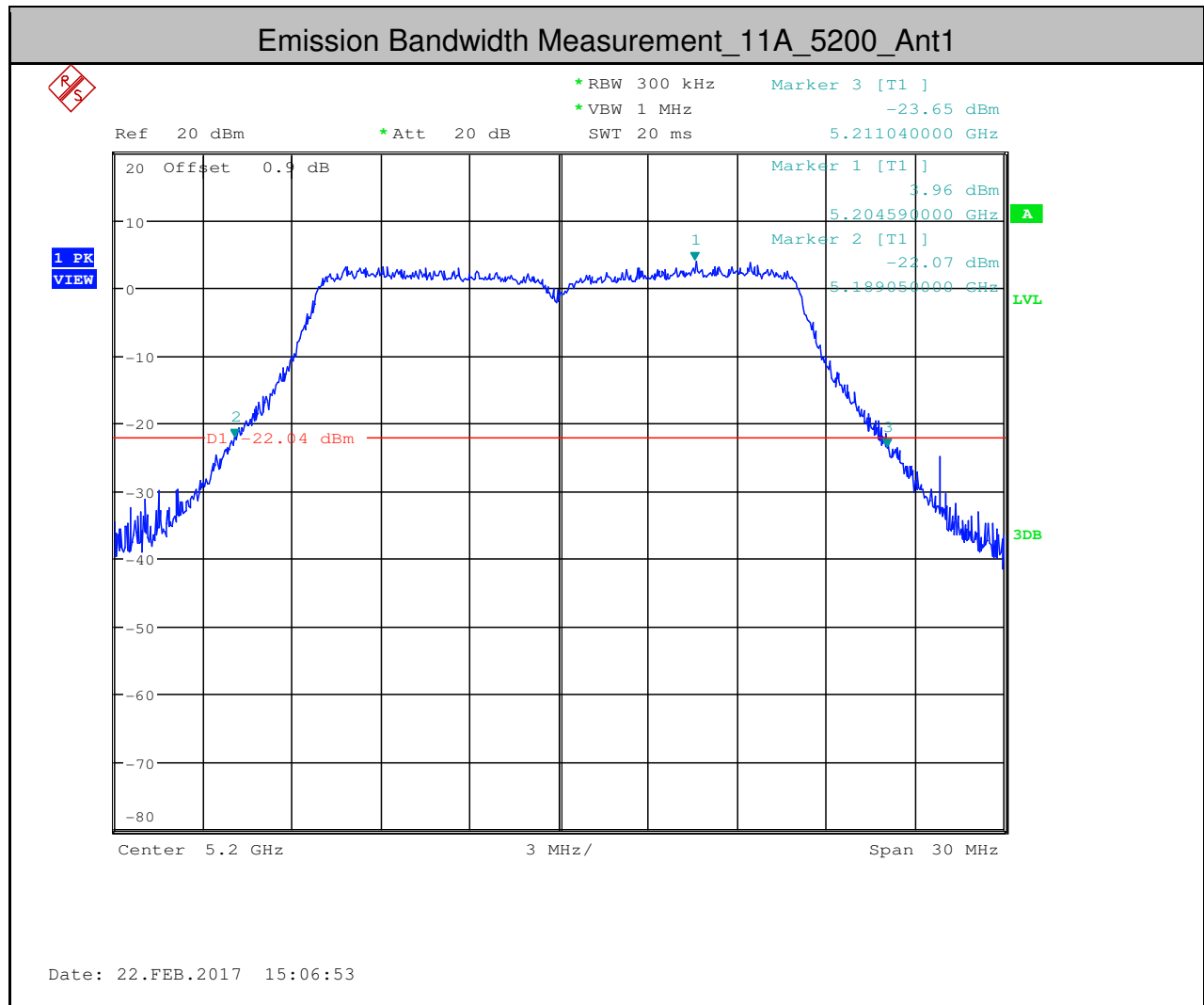
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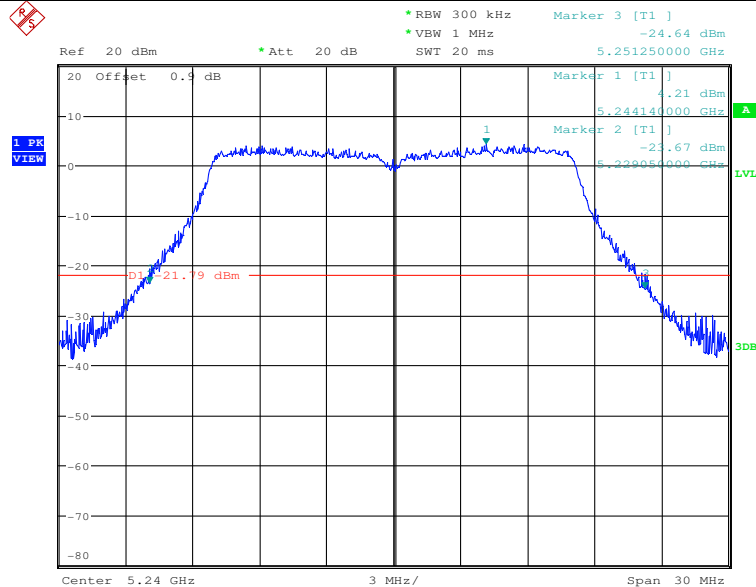
11N40	5190	Ant1	43.980	---	PASS
11N40	5230	Ant1	44.040	---	PASS
11N40	5755	Ant1	36.480	≥ 0.5	PASS
11N40	5795	Ant1	36.480	≥ 0.5	PASS





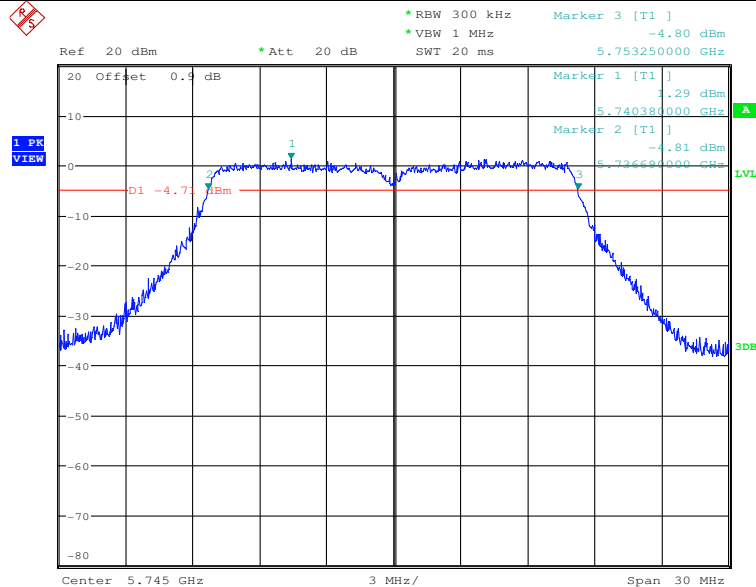


Emission Bandwidth Measurement_11A_5240_Ant1



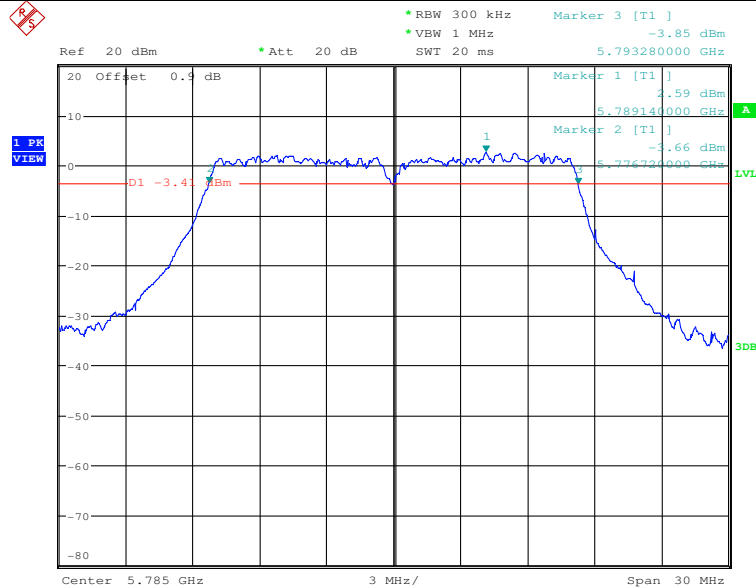


Emission Bandwidth Measurement_11A_5745_Ant1



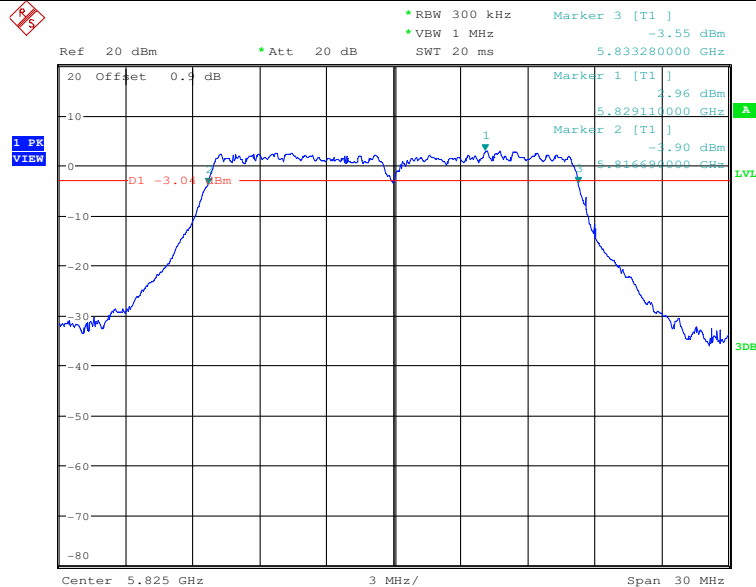


26dB Bandwidth Measurement_11A_5785_Ant1



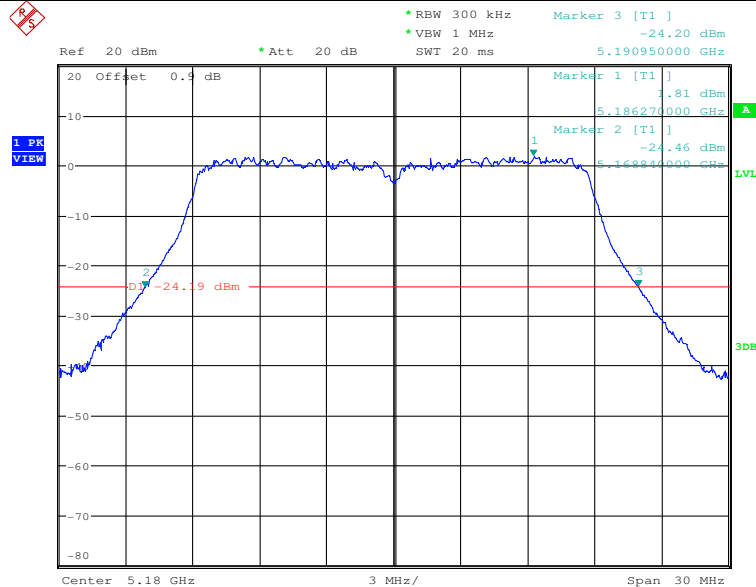


Emission Bandwidth Measurement_11A_5825_Ant1



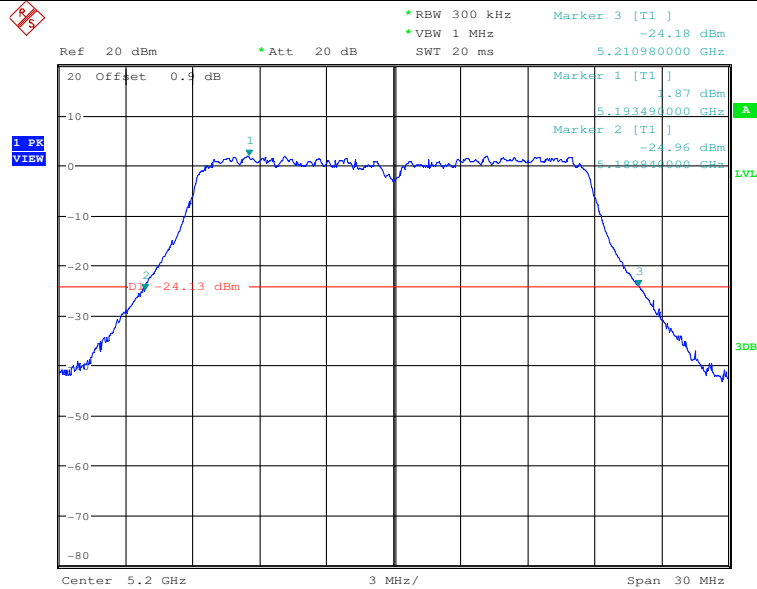


Emission Bandwidth Measurement_11AC20_5180_Ant1



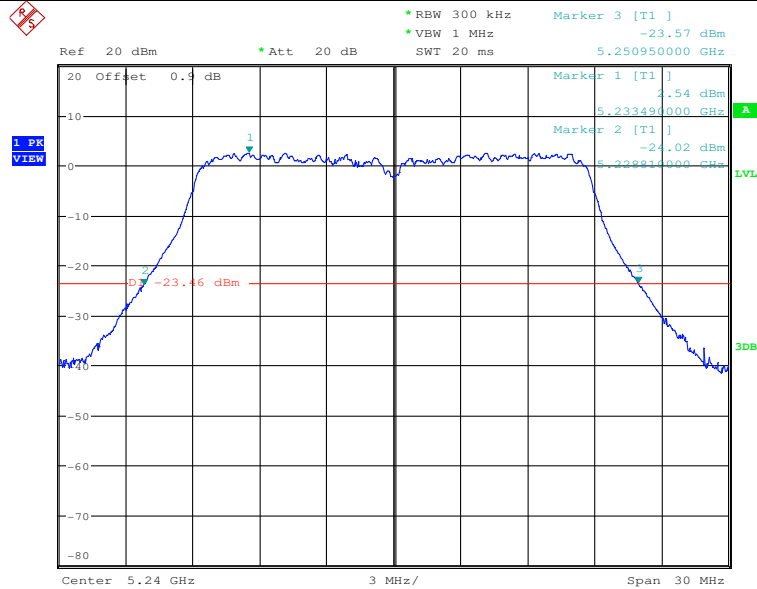


Emission Bandwidth Measurement_11AC20_5200_Ant1



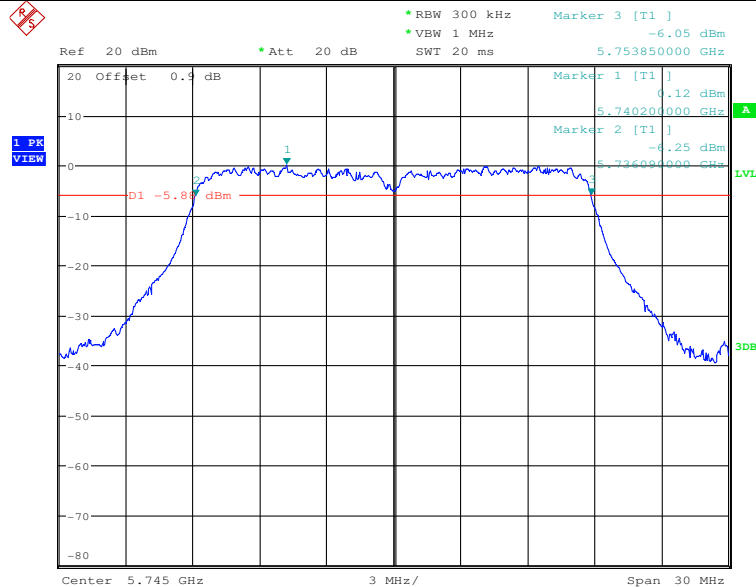


Emission Bandwidth Measurement_11AC20_5240_Ant1



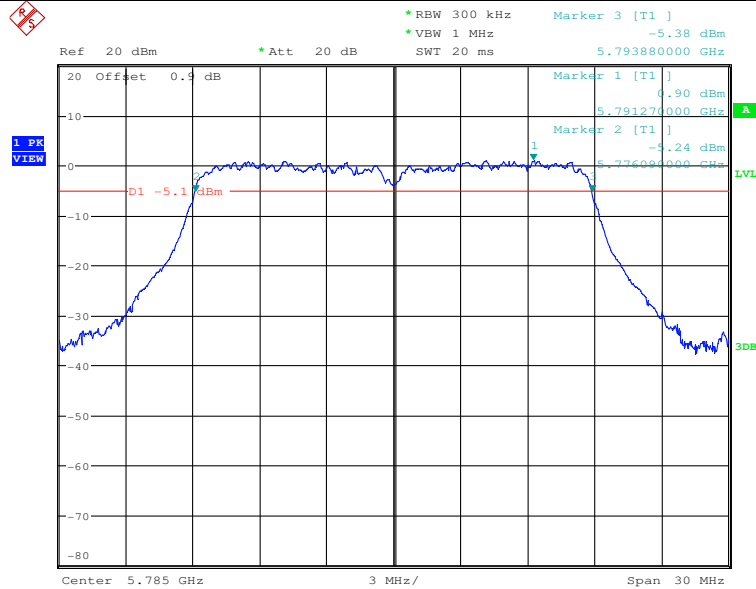


Emission Bandwidth Measurement_11AC20_5745_Ant1



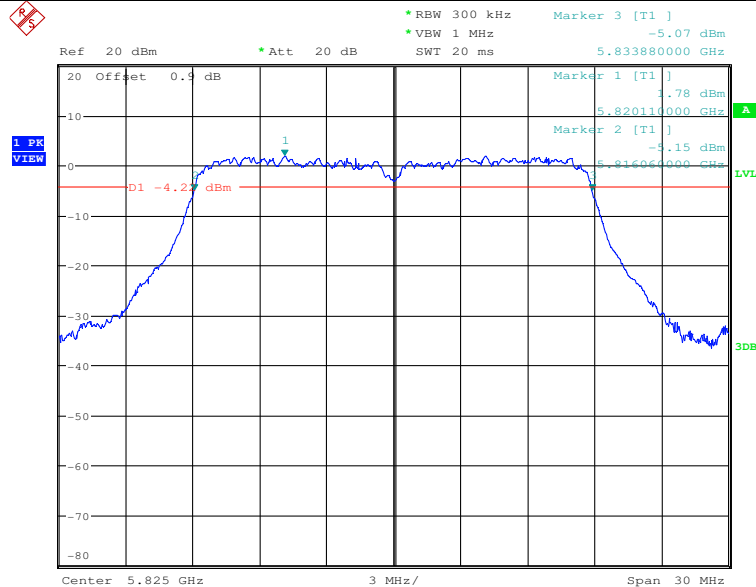


Emission Bandwidth Measurement_11AC20_5785_Ant1



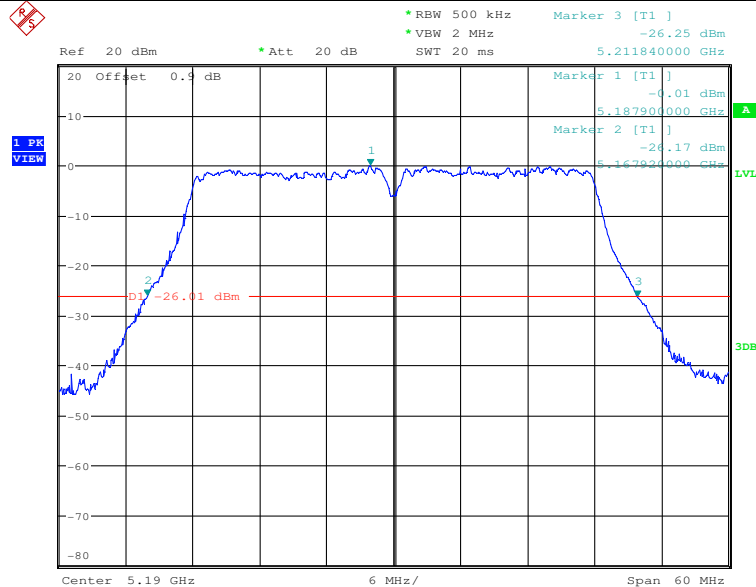


Emission Bandwidth Measurement_11AC20_5825_Ant1



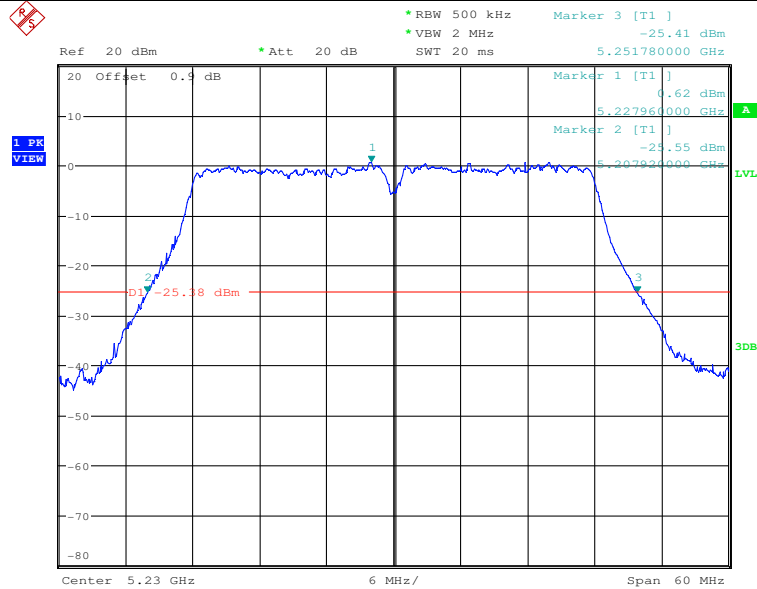


Emission Bandwidth Measurement_11AC40_5190_Ant1



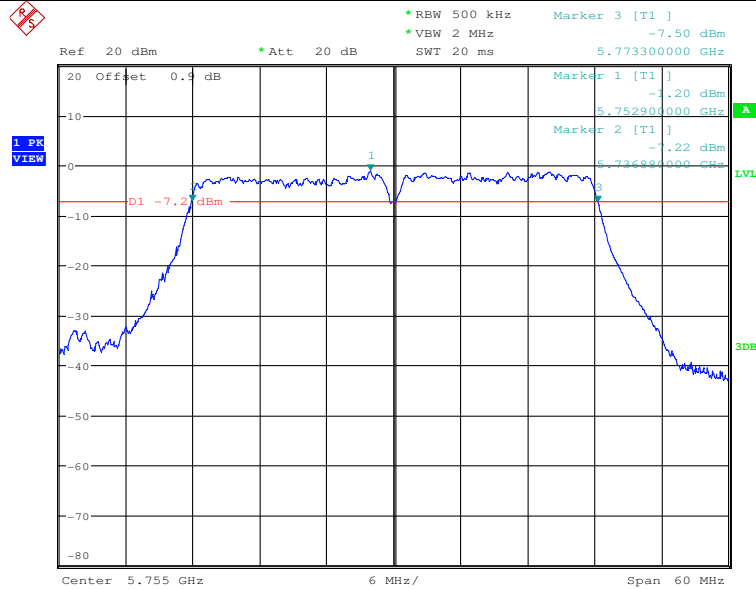


Emission Bandwidth Measurement_11AC40_5230_Ant1



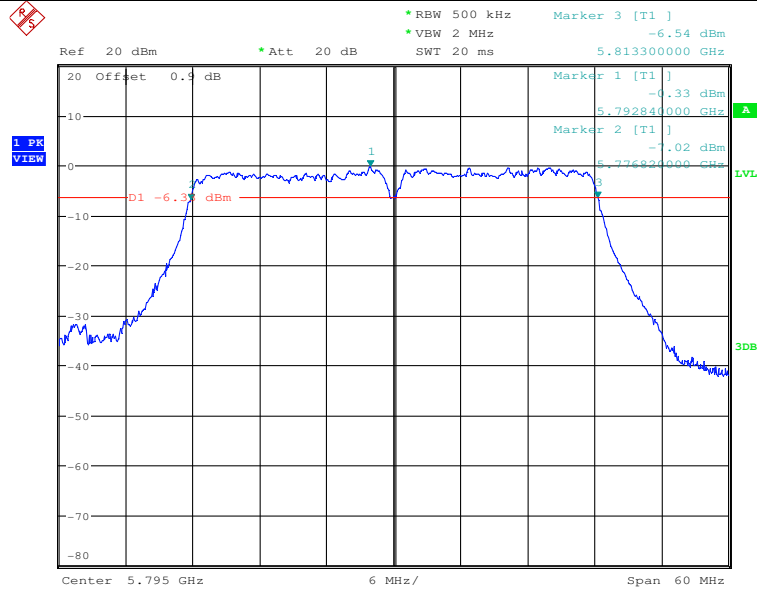


Emission Bandwidth Measurement_11AC40_5755_Ant1



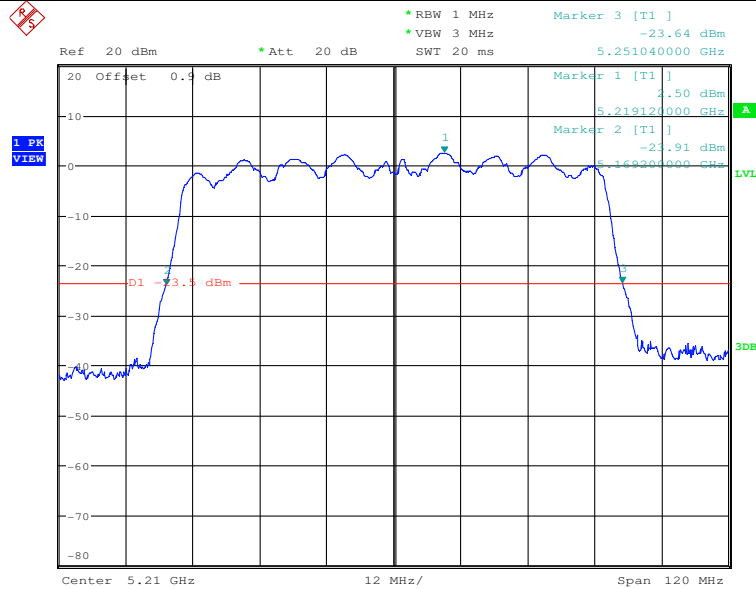


Emission Bandwidth Measurement_11AC40_5795_Ant1



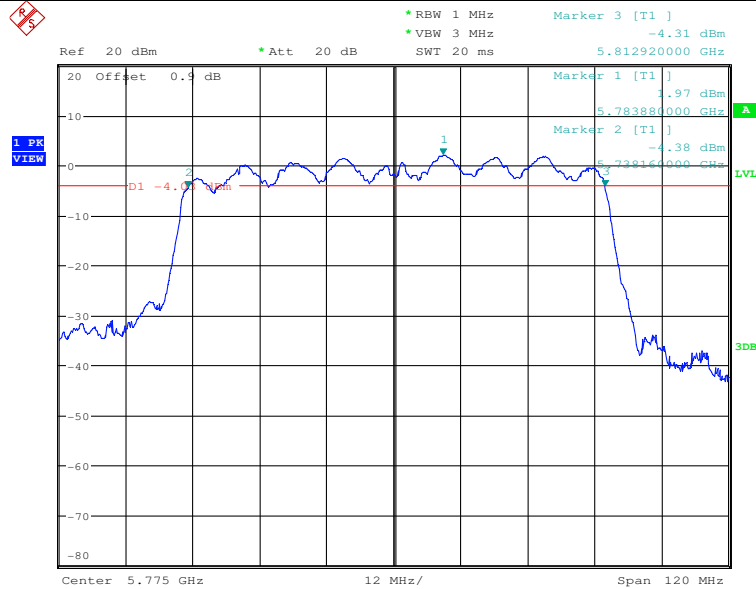


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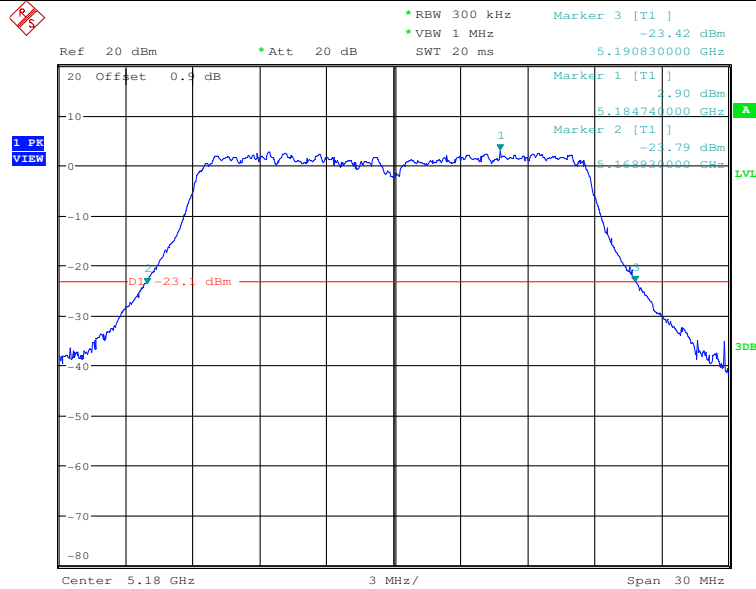


Emission Bandwidth Measurement_11AC80_5775_Ant1



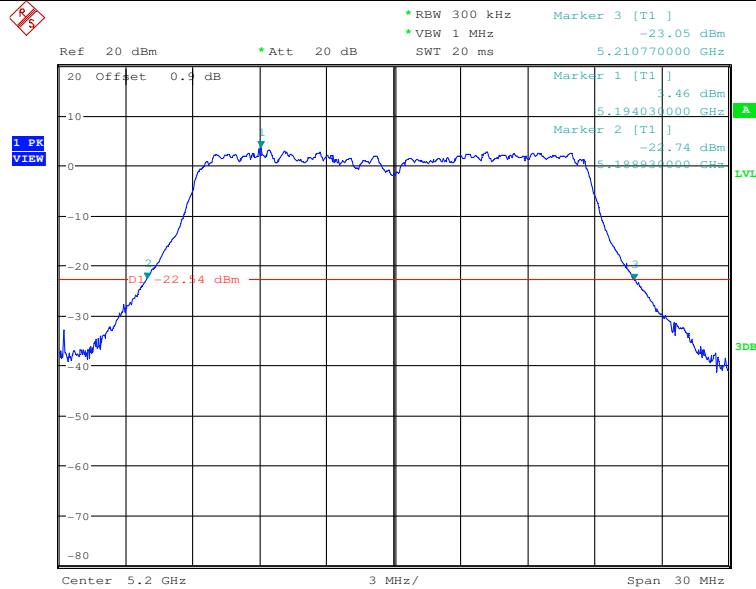


Emission Bandwidth Measurement_11N20_5180_Ant1



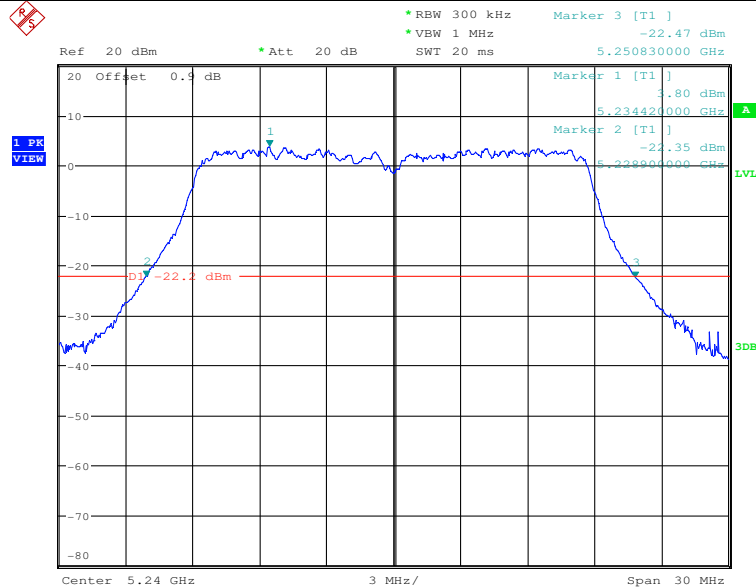


Emission Bandwidth Measurement_11N20_5200_Ant1



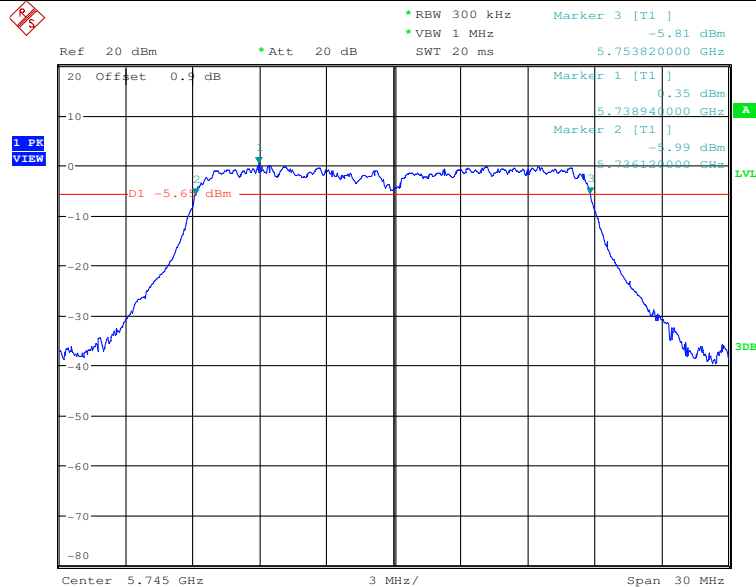


Emission Bandwidth Measurement_11N20_5240_Ant1



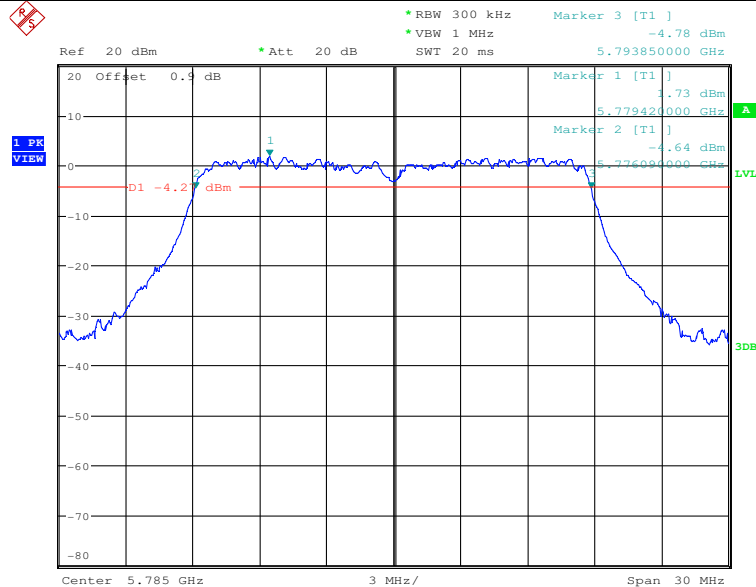


Emission Bandwidth Measurement_11N20_5745_Ant1



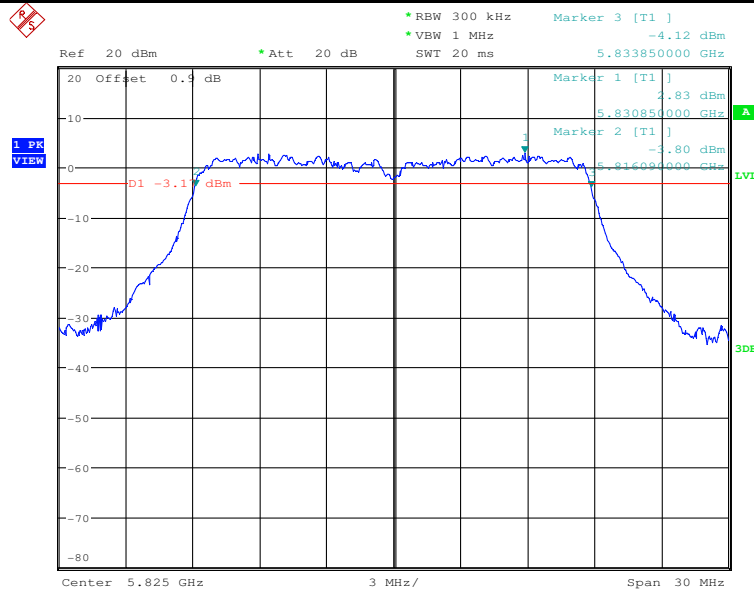


Emission Bandwidth Measurement_11N20_5785_Ant1



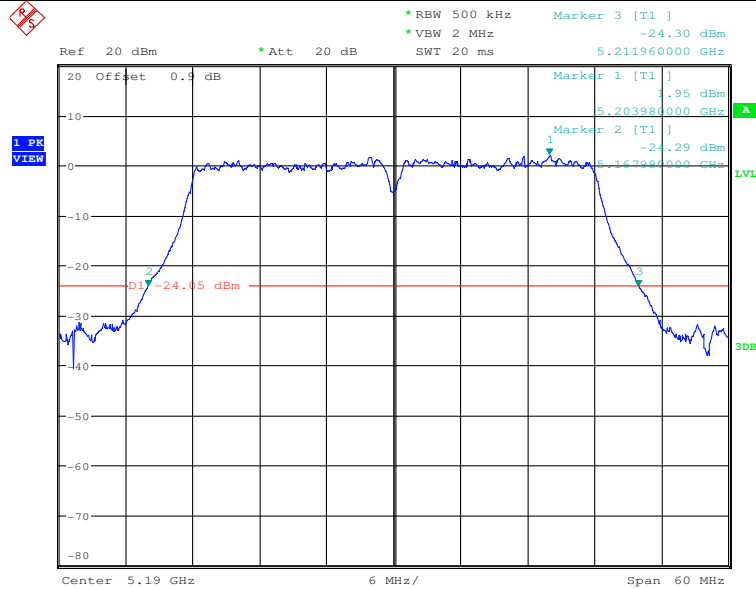


Emission Bandwidth Measurement_11N20_5825_Ant1



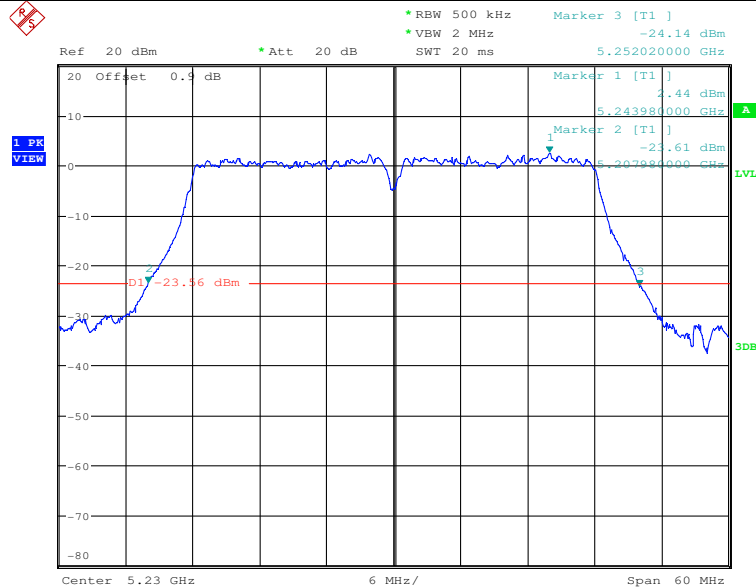


Emission Bandwidth Measurement_11N40_5190_Ant1



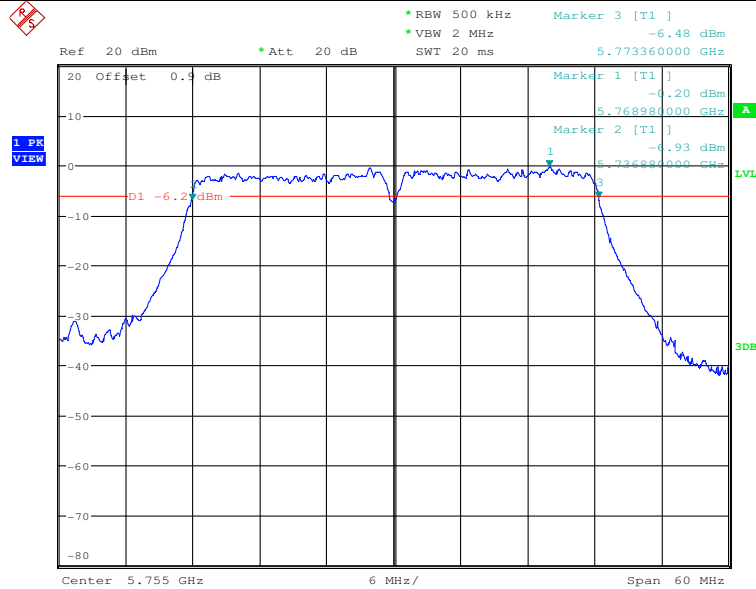


Emission Bandwidth Measurement_11N40_5230_Ant1



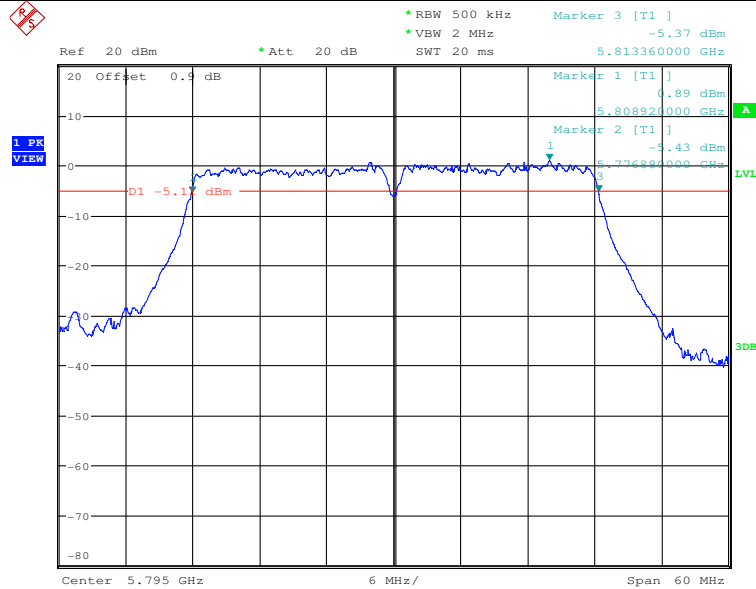


Emission Bandwidth Measurement_11N40_5755_Ant1





Emission Bandwidth Measurement_11N40_5795_Ant1



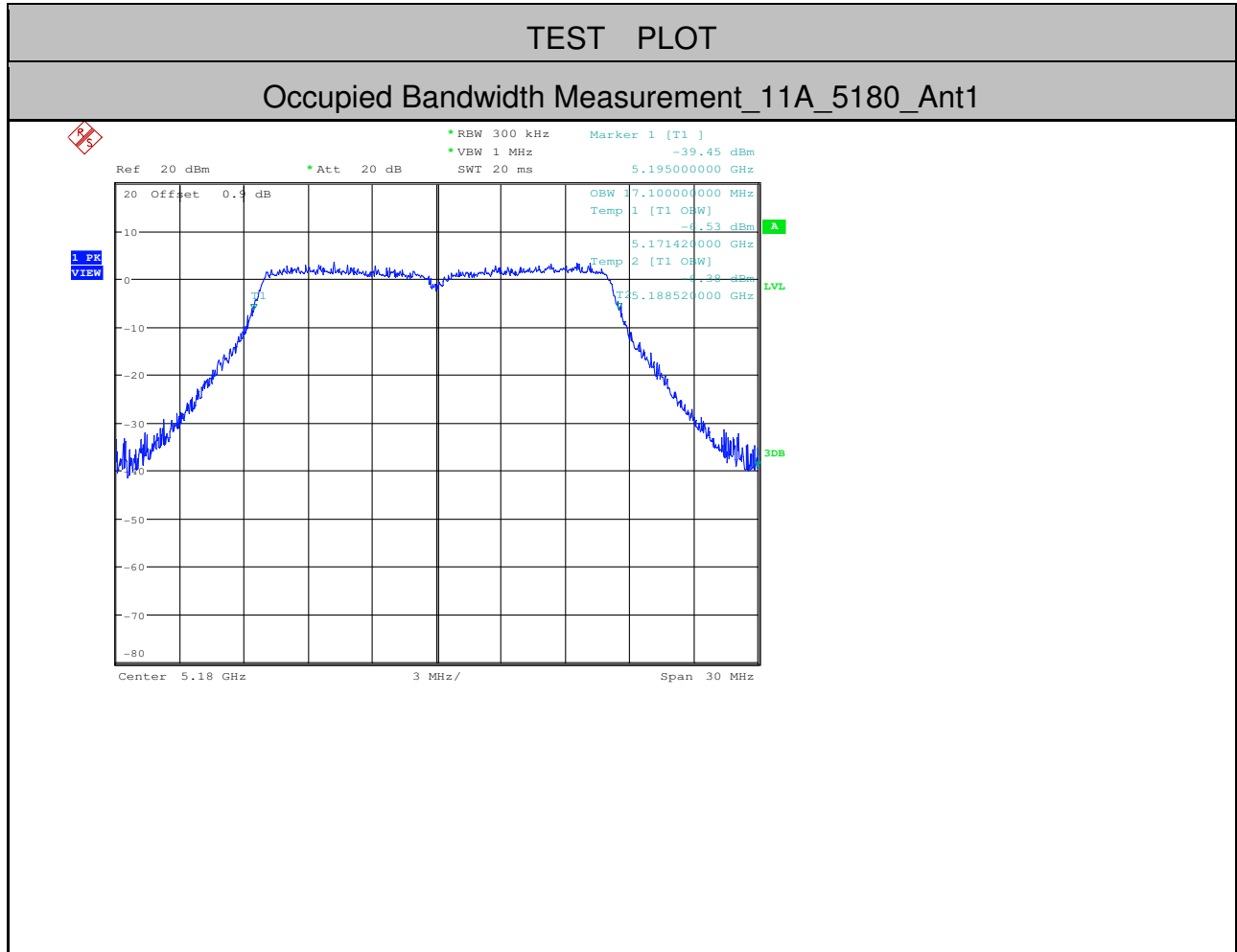


2.Occupied Bandwidth Measurement

Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict
11A	5180	Ant1	17.100	---	PASS
11A	5200	Ant1	17.070	---	PASS
11A	5240	Ant1	17.130	---	PASS
11A	5745	Ant1	17.070	---	PASS
11A	5785	Ant1	16.890	---	PASS
11A	5825	Ant1	16.890	---	PASS
11AC20	5180	Ant1	17.940	---	PASS
11AC20	5200	Ant1	17.970	---	PASS
11AC20	5240	Ant1	17.970	---	PASS
11AC20	5745	Ant1	17.940	---	PASS
11AC20	5785	Ant1	17.940	---	PASS
11AC20	5825	Ant1	17.940	---	PASS
11AC40	5190	Ant1	36.660	---	PASS
11AC40	5230	Ant1	36.660	---	PASS
11AC40	5755	Ant1	36.660	---	PASS
11AC40	5795	Ant1	36.660	---	PASS
11AC80	5210	Ant1	75.000	---	PASS
11AC80	5775	Ant1	75.120	---	PASS
11N20	5180	Ant1	17.910	---	PASS
11N20	5200	Ant1	17.940	---	PASS
11N20	5240	Ant1	17.940	---	PASS
11N20	5745	Ant1	17.910	---	PASS
11N20	5785	Ant1	17.910	---	PASS
11N20	5825	Ant1	17.940	---	PASS
11N40	5190	Ant1	36.720	---	PASS
11N40	5230	Ant1	36.720	---	PASS
11N40	5755	Ant1	36.660	---	PASS



11N40	5795	Ant1	36.720	---	PASS
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Occupied Bandwidth Measurement_11A_5200_Ant1

