

TESTREPORT

Applicant Name : HONG KONG YO YOUNG INTELLIGENT CO.,LIMITED
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KONG, KOWLOON, HONGKONG
Report Number: SZNS221017-47499E-RF-00C
FCC ID: 2A8X4-AIR1ULTRA

Test Standard (s)

FCC PART 15.407

Sample Description

Product Type: Smart phone
Model No.: Air1 Ultra
Multiple Model(s) No.: Air1 Ultra+, Air2 Ultra, B1 Ultra
Trade Mark: IIF150
Date Received: 2022/10/17
Report Date: 2022/11/30

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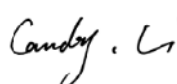
* In the configuration tested, the EUT complied with the standards above.

Prepared and Checked By:



Nick Fang
EMC Engineer

Approved By:



Candy Li
EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★".

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Smart phone
Tested Model	Air1 Ultra
Multiple Models	Air1 Ultra+, Air2 Ultra, B1 Ultra (model difference see product declaration letter of similarity)
Frequency Range	5G Wi-Fi: 5150-5250MHz; 5250-5350 MHz; 5470-5725 MHz; 5725-5850MHz
Mode	802.11a/n20/n40/ac20/ac40/ac80
Maximum Conducted Average Output Power	5150-5250 MHz: 11.19dBm 5250-5350 MHz: 11.10dBm 5470-5725 MHz: 11.38dBm 5725-5850 MHz: 12.24dBm
Modulation Technique	OFDM
Antenna Specification*	0.23dBi (provided by the applicant)
Voltage Range	DC 3.85V from battery or DC 5V/9V/12V/15V/3.3-11V from adapter
Sample serial number	1MLU (Assigned by ATC)
Sample/EUT Status	Good condition
Adapter information	Model: FC69U Input: AC 100-240V, 50/60Hz, 0.8A Max Output: QC: DC 5V, 3A/9V, 3A/12V, 2.5A PD: DC 5V, 3A/9V, 3A/12V, 2.5A/15V, 2A PPS: DC 3.3-11V, 2.72A

Objective

This test report is in accordance with Part 2-Subpart J, Part 15-Subparts A and E of the Federal Communication Commissions rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart E, section 15.203, 15.205, 15.207, 15.209 and 15.407 rules.

Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices. And KDB789033 D02 General U-NII Test Procedures New Rules v02r01.

All emissions measurement was performed at Shenzhen Accurate Technology Co., Ltd. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Each test item follows test standards and with no deviation.

Measurement Uncertainty

Parameter		Uncertainty
Occupied Channel Bandwidth		5%
RF Frequency		0.082×10^{-7}
RF output power, conducted		0.73dB
Unwanted Emission, conducted		1.6dB
AC Power Lines Conducted Emissions		2.72dB
Emissions, Radiated	9kHz - 30MHz	2.66dB
	30MHz - 1GHz	4.28dB
	1GHz - 18GHz	4.98dB
	18GHz - 26.5GHz	5.06dB
	26.5GHz - 40GHz	4.72dB
Temperature		1°C
Humidity		6%
Supply voltages		0.4%

Note: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval. Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

Test Facility

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358, the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 4297.01.

Listed by Innovation, Science and Economic Development Canada (ISED), the Registration Number is 5077A.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in an engineering mode, which was provided by manufacturer.

For 5150-5250MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
38	5190	46	5230
40	5200	48	5240
42	5210	/	/

For 802.11a/n20/ac20 mode: channel 36, 40, 48 were tested;

For 802.11n40/ac40 mode: channel 38, 46 were tested;

For 802.11ac80 mode, channel 42 was tested.

For 5250-5350MHz Band, 7 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
54	5270	62	5310
56	5280	64	5320
58	5290	/	/

For 802.11a, 802.11n20/ac20 mode: channel 52, 56, 64 were tested;

For 802.11n40/ac40 mode: channel 54, 62 were tested;

For 802.11ac80 mode, channel 58 was tested.

For 5470-5725MHz Band, 18 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	120	5600
102	5510	122	5610
104	5520	124	5620
106	5530	126	5630
108	5540	128	5640
110	5550	132	5660
112	5560	134	5670
116	5580	136	5680
118	5590	140	5700

For 802.11a, 802.11n20/ac20 mode: channel 100, 116, 140 were tested;

For 802.11n40/ac40 mode: channel 102, 110, 134 were tested.

For 802.11ac80 mode, channel 106, 122 was tested.

For 5725-5850MHz Band, 8 channels are provided to testing:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	157	5785
151	5755	159	5795
153	5765	161	5805
155	5775	165	5825

For 802.11a/n20/ac20 mode: channel 149, 157, 165 were tested;

For 802.11n40/ac40 mode: channel 151, 159 were tested;

For 802.11ac80 mode, channel 155 was tested

EUT Exercise Software

EUT was test in engineering mode.

The worst case was performed under:

U-NII	Mode	Data rate	Power Level*		
			Low Channel	Middle Channel	High Channel
5150 – 5250MHz	802.11a	6Mbps	16	16	16
	802.11n-HT20	MCS0	16	16	16
	802.11n-HT40	MCS0	16	/	16
	802.11ac20	MCS0	16	16	16
	802.11ac40	MCS0	16	/	16
	802.11ac80	MCS0	/	16	/
5250-5350MHz	802.11a	6Mbps	16	16	16
	802.11n-HT20	MCS0	16	16	16
	802.11n-HT40	MCS0	16	/	16
	802.11ac20	MCS0	16	16	16
	802.11ac40	MCS0	16	/	16
	802.11ac80	MCS0	/	16	/
5470 – 5725MHz	802.11a	6Mbps	16	16	16
	802.11n-HT20	MCS0	16	16	16
	802.11n-HT40	MCS0	16	16	16
	802.11ac20	MCS0	16	16	16
	802.11ac40	MCS0	16	16	16
	802.11ac80	MCS0	16	/	16
5725 – 5850MHz	802.11a	6Mbps	16	16	16
	802.11n-HT20	MCS0	16	16	16
	802.11n-HT40	MCS0	16	/	16
	802.11ac20	MCS0	16	16	16
	802.11ac40	MCS0	16	/	16
	802.11ac80	MCS0	/	16	/

The worse-case data rates are determined to be as follows for each mode based upon investigations by measuring the output power and PSD across all data rated bandwidths, and modulations.

The power level was provided by the applicant.

Duty cycle

Test Result: Pass. Please refer to the Appendix.

Equipment Modifications

No modification was made to the EUT tested.

Support Equipment List and Details

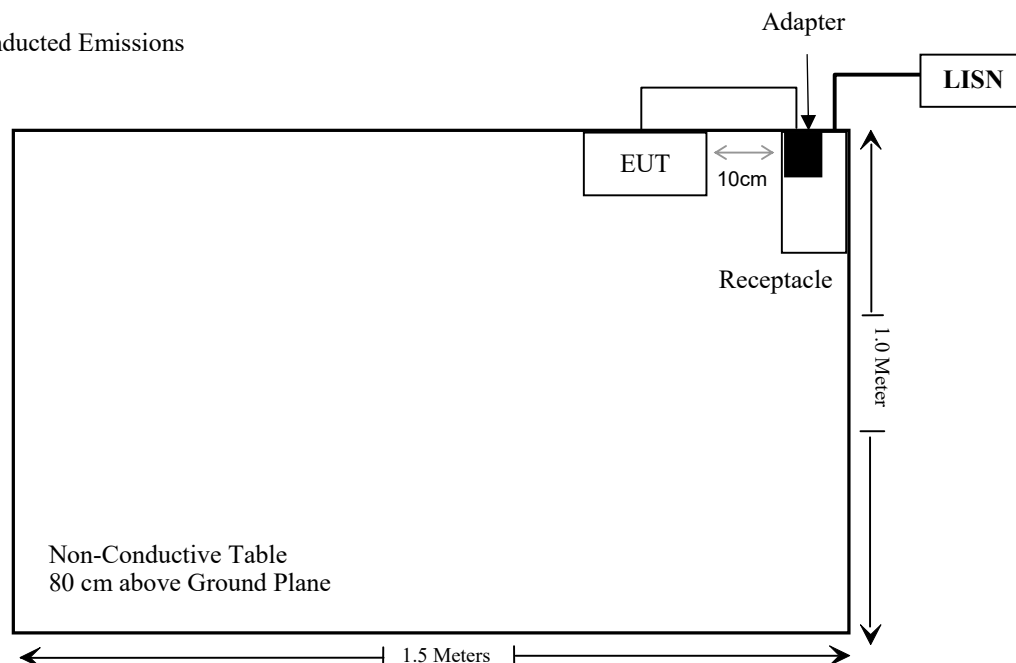
Manufacturer	Description	Model	Serial Number
/	/	/	/

External I/O Cable

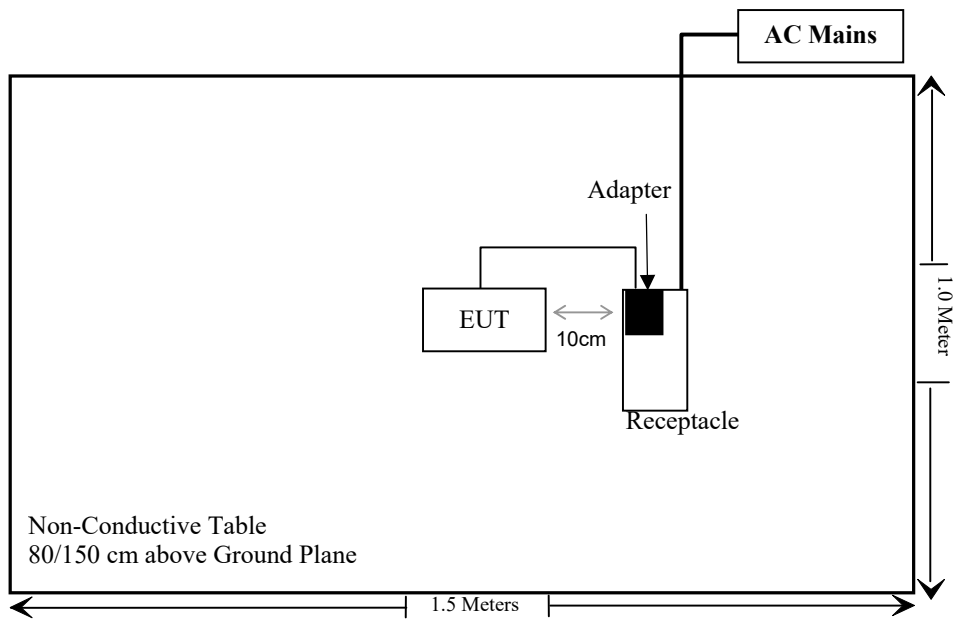
Cable Description	Length (m)	From Port	To
Un-shielding Detachable USB Cable	1.0	EUT	Adapter

Block Diagram of Test Setup

For Conducted Emissions



For Radiated Emissions:



SUMMARY OF TEST RESULTS

FCC Rules	Description of Test	Result
§1.1307 (b) & §2.1093	RF Exposure	Compliant
§15.203	Antenna Requirement	Compliant
§15.407(b)(9)& §15.207(a)	Conducted Emissions	Compliant
§15.205& §15.209 &§15.407(b)	Undesirable Emission& Restricted Bands	Compliant
§15.407(a) (e)	26 dB Emission Bandwidth & 6dB Bandwidth	Compliant
§15.407(a)	Conducted Transmitter Output Power	Compliant
§15.407 (a)	Power Spectral Density	Compliant
§15.407 (h)	Transmit Power Control (TPC)	Not Applicable
§15.407 (h)	Dynamic Frequency Selection (DFS)	Compliant*

Not Applicable: the EUT has no TPC function which was declared by the applicant.

Compliant*: Please refer to the report: SZNS221017-47499E-RF-00D

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde& Schwarz	EMI Test Receiver	ESCI	100784	2021/12/13	2022/12/12
Rohde & Schwarz	L.I.S.N.	ENV216	101314	2021/12/13	2022/12/12
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2021/12/13	2022/12/12
Unknown	RF Coaxial Cable	No.17	N0350	2021/12/14	2022/12/13
Conducted Emission Test Software: e3 19821b (V9)					
Radiated Emissions Test					
Rohde& Schwarz	Test Receiver	ESR	102725	2021/12/13	2022/12/12
Rohde&Schwarz	Spectrum Analyzer	FSV40	101949	2021/12/13	2022/12/12
SONOMA INSTRUMENT	Amplifier	310 N	186131	2021/11/09	2022/11/08
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2021/11/09	2022/11/08
Quinstar	Amplifier	QLW-18405536-J0	15964001002	2021/11/11	2022/11/10
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	9120D-1067	2020/01/05	2023/01/04
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2020/01/05	2023/01/04
Radiated Emission Test Software: e3 19821b (V9)					
Unknown	RF Coaxial Cable	No.10	N050	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.11	N1000	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.12	N040	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.13	N300	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.14	N800	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.15	N600	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.16	N650	2021/12/14	2022/12/13
CD	Band Reject Filter	BRM-5.15/5.35g-45	075	2021/12/14	2022/12/13
CD	Band Reject Filter	BRM-5.47/5.725G-45	055	2021/12/14	2022/12/13
CD	Band Reject Filter	BRM-5.725/5.875G-45	065	2021/12/14	2022/12/13

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Tonscend	RF Control Unit	JS0806-2	19G8060182	2022/10/24	2023/10/23
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101590	2022/01/19	2023/01/18
HP	20dB Attenuator	8491A	53857	2021/12/14	2022/12/13
Unknown	RF Coaxial Cable	No.31	RF-01	Each time	Each time

* **Statement of Traceability:** Shenzhen Accurate Technology Co., Ltd. attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

FCC§15.247 (i), §1.1307 (b) & §2.1093 – RF EXPOSURE

Applicable Standard

According to FCC §2.1093 and §1.1307(b), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

Measurement Result

Please refer to SAR test report: CR221047499-20.

FCC §15.203 – ANTENNA REQUIREMENT

Applicable Standard

According to § 15.203, 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 shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the user of a standard antenna jack or electrical connector is prohibited. The structure and application of the EUT were analyzed to determine compliance with section §15.203 of the rules. §15.203 state that the subject device must meet the following criteria:

- a. Antenna must be permanently attached to the unit.
- b. Antenna must use a unique type of connector to attach to the EUT.

Unit must be professionally installed, and installer shall be responsible for verifying that the correct antenna is employed with the unit.

And according to FCC 47 CFR section 15.407 (a), if the transmitting antennas of directional gain greater than 6dBi are used, the transmit power and power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Antenna Connector Construction

The EUT has one internal antenna which was permanently attached, and the maximum antenna gain is 0.23dBi, fulfill the requirement of this section. Please refer to the EUT photos.

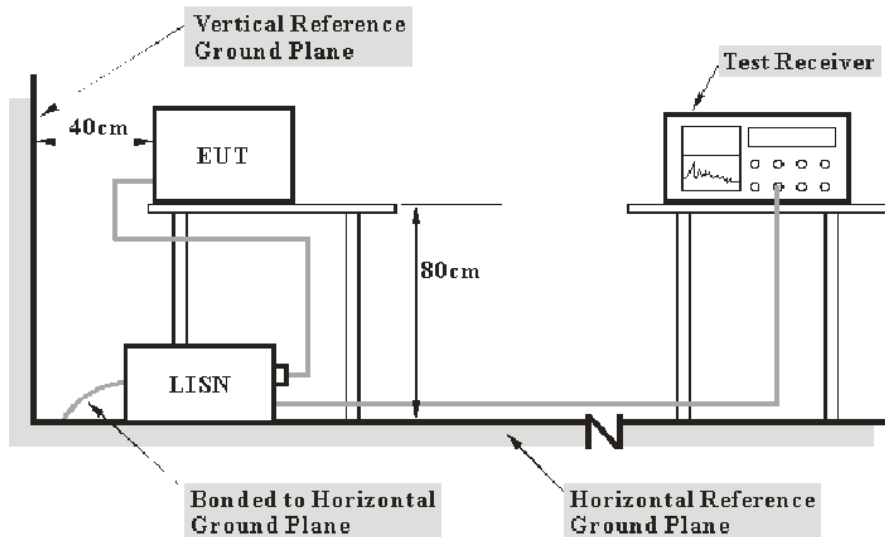
Result: Compliant.

FCC §15.407 (b) (6) §15.207 (a) – CONDUCTED EMISSIONS

Applicable Standard

FCC §15.207, §15.407(b) (6)

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC Part 15.207 limits.

The spacing between the peripherals was 10 cm.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

Test Procedure

During the conducted emission test, the adapter was connected to the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and Average detection mode.

Corrected Factor & Margin Calculation

The Transd factor is calculated by adding LISN VDF (Voltage Division Factor) and Cable Loss. The basic equation is as follows:

$$\text{Transd Factor} = \text{LISN VDF} + \text{Cable Loss}$$

The “**Over limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over limit of -7 dB means the emission is 7 dB below the limit. The equation for calculation is as follows:

$$\begin{aligned}\text{Over Limit} &= \text{Level} - \text{Limit} \\ \text{Level} &= \text{Read Level} + \text{Factor}\end{aligned}$$

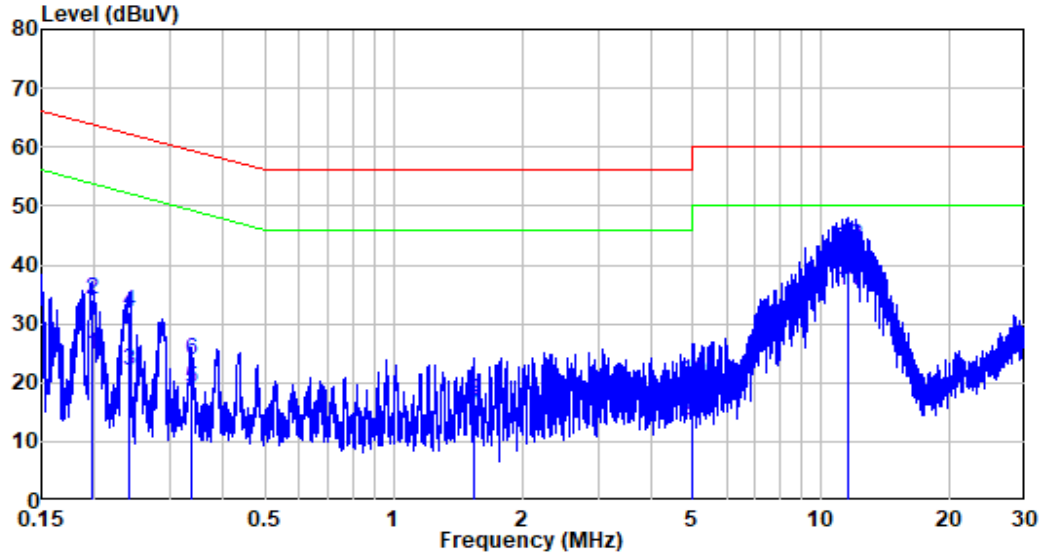
Test Data

Environmental Conditions

Temperature:	24 °C
Relative Humidity:	54 %
ATM Pressure:	101.0 kPa

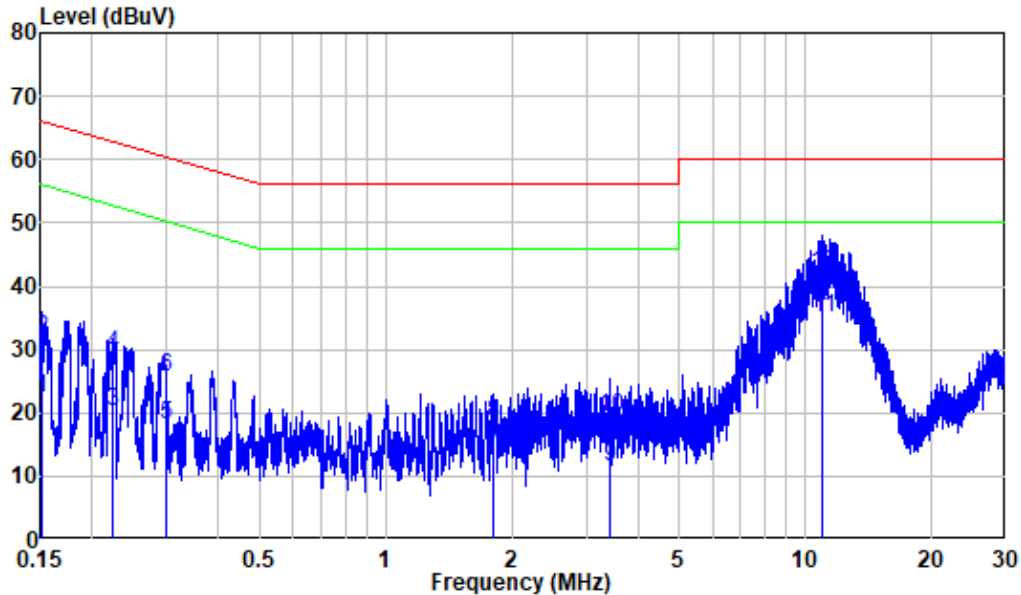
The testing was performed by Jason Liu on 2022-11-07.

EUT operation mode: Transmitting (worst case is 802.11ac20, 5745MHz)

AC 120V/60 Hz, Line:

Site : Shielding Room
 Condition: Line
 Job No. : SZNS221017-47499E-RF
 Mode : 5G WIFI
 Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.196	9.80	14.93	24.73	53.77	-29.04	Average
2	0.196	9.80	24.26	34.06	63.77	-29.71	QP
3	0.241	9.80	12.22	22.02	52.04	-30.02	Average
4	0.241	9.80	22.19	31.99	62.04	-30.05	QP
5	0.336	9.80	9.15	18.95	49.31	-30.36	Average
6	0.336	9.80	14.12	23.92	59.31	-35.39	QP
7	1.533	9.82	5.29	15.11	46.00	-30.89	Average
8	1.533	9.82	6.95	16.77	56.00	-39.23	QP
9	4.988	9.85	3.51	13.36	46.00	-32.64	Average
10	4.988	9.85	10.23	20.08	56.00	-35.92	QP
11	11.521	9.92	25.85	35.77	50.00	-14.23	Average
12	11.521	9.92	33.26	43.18	60.00	-16.82	QP

AC 120V/60 Hz, Neutral:

Site : Shielding Room
 Condition: Neutral
 Job No. : SZNS221017-47499E-RF
 Mode : 5G WIFI
 Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.152	9.80	12.42	22.22	55.91	-33.69	Average
2	0.152	9.80	21.89	31.69	65.91	-34.22	QP
3	0.224	9.80	10.37	20.17	52.67	-32.50	Average
4	0.224	9.80	19.37	29.17	62.67	-33.50	QP
5	0.300	9.80	8.44	18.24	50.24	-32.00	Average
6	0.300	9.80	15.98	25.78	60.24	-34.46	QP
7	1.811	9.82	4.02	13.84	46.00	-32.16	Average
8	1.811	9.82	8.57	18.39	56.00	-37.61	QP
9	3.420	9.83	1.54	11.37	46.00	-34.63	Average
10	3.420	9.83	9.52	19.35	56.00	-36.65	QP
11	11.014	10.01	24.96	34.97	50.00	-15.03	Average
12	11.014	10.01	31.99	42.00	60.00	-18.00	QP

§15.205 & §15.209 & §15.407(B)– UNDESIRABLE EMISSION

Applicable Standard

FCC §15.407 (b); §15.209; §15.205;

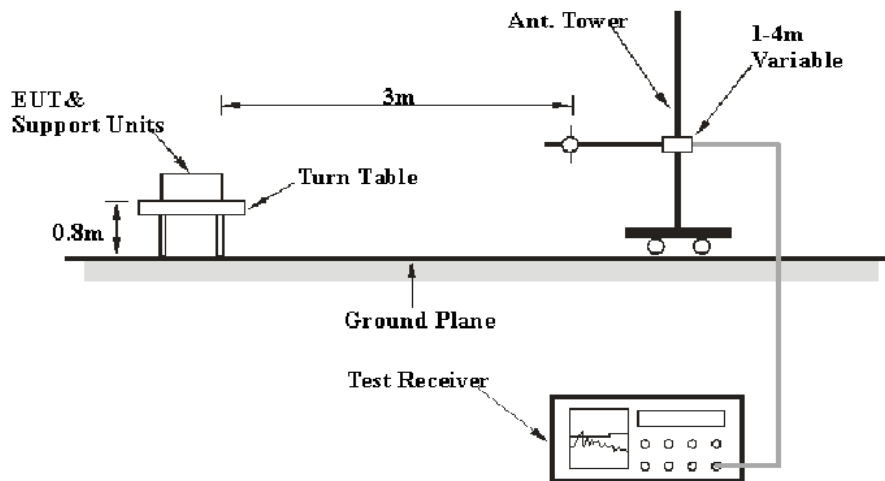
(b) Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

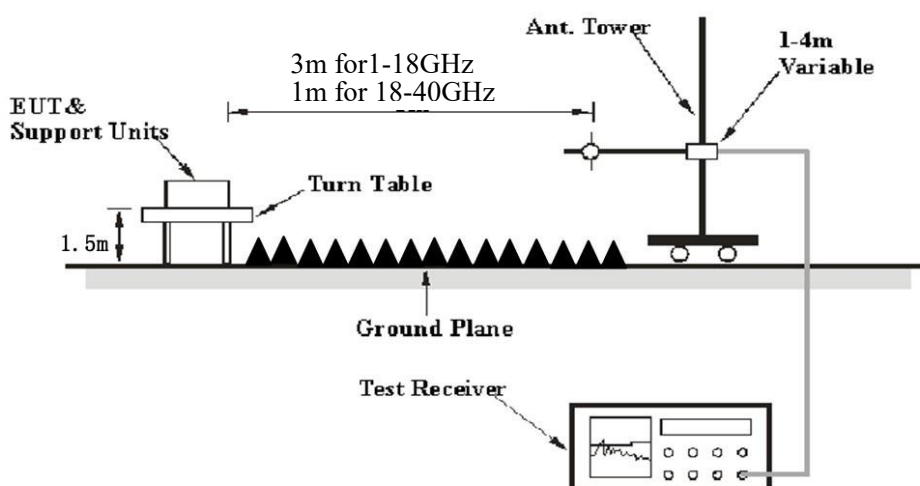
- (1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (2) For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (3) For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.
- (4) For transmitters operating in the 5.725-5.85 GHz band:
 - (i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

EUT Setup

Below 1 GHz:



Above 1 GHz:

The setup of EUT is according with per ANSI C63.10-2013 measurement procedure. The specification used was with the FCC 15.209 and FCC 15.407 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

EMI Test Receiver & Spectrum Analyzer Setup

The system was investigated from 30 MHz to 40 GHz.

During the radiated emission test, the EMI test receiver & Spectrum Analyzer Setup were set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Measurement
30 MHz – 1000 MHz	100 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	PK
	1MHz	10 Hz ^{Note 1}	/	Average
	1MHz	> 1/T ^{Note 2}	/	Average

Note 1: when duty cycle is no less than 98%

Note 2: when duty cycle is less than 98%

Test Procedure**Radiated Spurious Emission**

During the radiated emission test, the adapter was connected to the AC floor outlet.

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all the installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1GHz, peak and Average detection modes for frequencies above 1GHz.

According to ANSI C63.10-2013,9.4: For field strength measurements made at other than the distance at which the applicable limit is specified, extrapolate the measured field strength to the field strength at the distance specified by the limit using an inverse distance correction factor (20 dB/decade of distance). In some cases, a different distance correction factor may be required;

$$E_{\text{SpecLimit}} = E_{\text{Meas}} + 20 \log \left(\frac{d_{\text{Meas}}}{d_{\text{SpecLimit}}} \right)$$

where

$E_{\text{SpecLimit}}$	is the field strength of the emission at the distance specified by the limit, in dB μ V/m
E_{Meas}	is the field strength of the emission at the measurement distance, in dB μ V/m
d_{Meas}	is the measurement distance, in m
$d_{\text{SpecLimit}}$	is the distance specified by the limit, in m

So the extrapolation factor of 1m is $20 \cdot \log(1/3) = -9.5$ dB, for 18-40GHz range, the limit of 1m distance was added by 9.5dB from limit of 3m to compared with the result measurement at 1m distance.

Factor & Margin Calculation

The Factor is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain. The basic equation is as follows:

$$\text{Factor} = \text{Antenna Factor} + \text{Cable Loss} - \text{Amplifier Gain}$$

The “**Over Limit/Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit/margin of -7dB means the emission is 7dB below the limit. The equation for calculation is as follows:

$$\begin{aligned} \text{Over Limit/Margin} &= \text{Level / Corrected Amplitude} - \text{Limit} \\ \text{Level / Corrected Amplitude} &= \text{Read Level} + \text{Factor} \end{aligned}$$

Test Data

Environmental Conditions

Temperature:	22~25.5 °C
Relative Humidity:	52~62%
ATM Pressure:	101.0~101.3 kPa

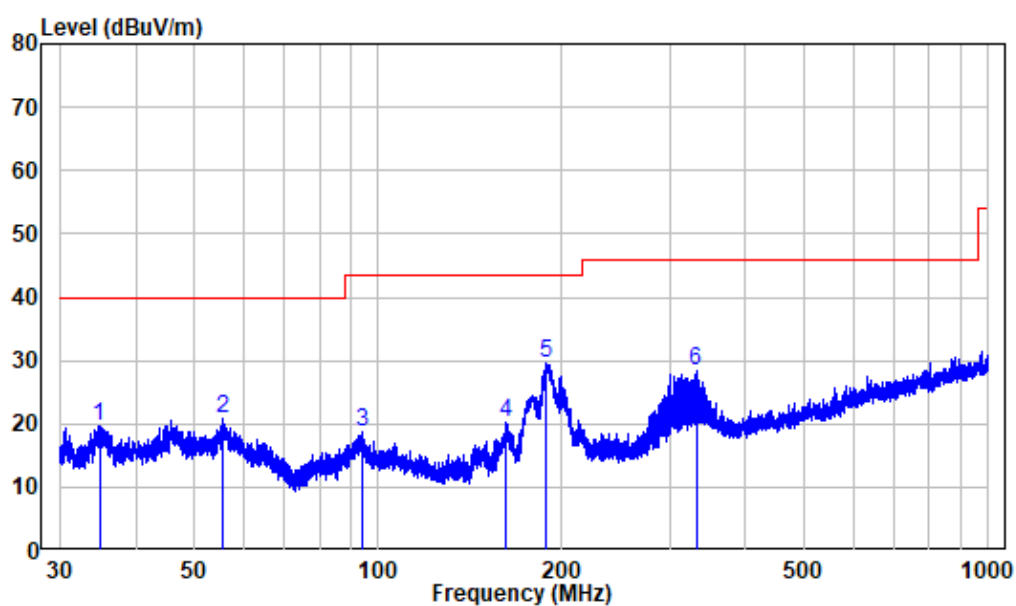
The testing was performed by jimi on 2022-11-07 for below 1GHz, by Level Li on 2022-10-27 and for above 1GHz.

EUT operation mode: Transmitting (Pre-scan in the X,Y and Z axes of orientation, the worst case of X-axes orientation was recorded)

30 MHz – 1 GHz: (worst case is 802.11ac20, 5745MHz)

Note: When the test result of Peak was more than 6dB below the limit of QP, just the Peak value was recorded.

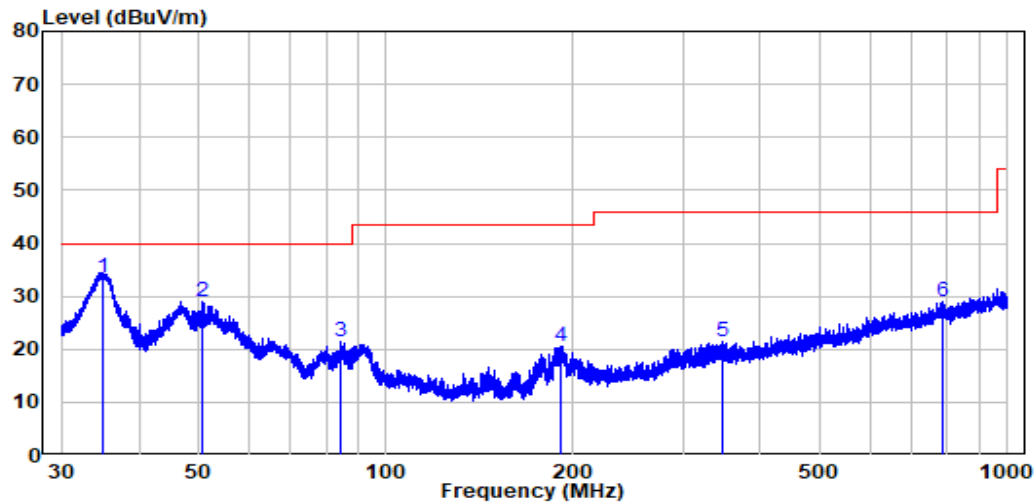
Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No. : SZNS221017-47499E-RF
Test Mode: 5G WIFI Transmitting

	Freq	Factor	Read Level	Level	Limit	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	34.867	-11.58	31.13	19.55	40.00	-20.45	Peak
2	55.609	-10.23	31.10	20.87	40.00	-19.13	Peak
3	94.346	-12.62	31.29	18.67	43.50	-24.83	Peak
4	161.403	-14.25	34.46	20.21	43.50	-23.29	Peak
5	187.835	-11.84	41.37	29.53	43.50	-13.97	Peak
6	331.791	-7.86	36.29	28.43	46.00	-17.57	Peak

Vertical



Site : chamber
Condition: 3m VERTICAL
Job No. : SZNS221017-47499E-RF
Test Mode: 5G WIFI Transmitting

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	34.974	-11.55	45.20	33.65	40.00	-6.35	QP
2	50.741	-9.94	38.99	29.05	40.00	-10.95	Peak
3	84.295	-15.92	37.36	21.44	40.00	-18.56	Peak
4	191.493	-11.34	32.01	20.67	43.50	-22.83	Peak
5	346.961	-7.25	28.67	21.42	46.00	-24.58	Peak
6	787.851	-0.09	29.11	29.02	46.00	-16.98	Peak

Above 1GHz:**5150-5250 MHz:**

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5180MHz									
4500	64.83	PK	163	1.1	H	-4.72	60.11	74	-13.89
4500	48.75	AV	163	1.1	H	-4.72	44.03	54	-9.97
4500	64.85	PK	64	1.5	V	-4.72	60.13	74	-13.87
4500	48.55	AV	64	1.5	V	-4.72	43.83	54	-10.17
5150	65.91	PK	253	1.2	H	-2.73	63.18	74	-10.82
5150	48.77	AV	253	1.2	H	-2.73	46.04	54	-7.96
5150	65.56	PK	187	1.4	V	-2.73	62.83	74	-11.17
5150	48.28	AV	187	1.4	V	-2.73	45.55	54	-8.45
10360	52.31	PK	186	1.6	H	8.12	60.43	68.2	-7.77
10360	51.84	PK	150	1.6	V	8.12	59.96	68.2	-8.24
5200MHz									
10400	52.64	PK	14	1.3	H	8.24	60.88	68.2	-7.32
10400	51.61	PK	110	1.3	V	8.24	59.85	68.2	-8.35
5240MHz									
5350	64.41	PK	194	1.7	H	-2.33	62.08	74	-11.92
5350	49.12	AV	194	1.7	H	-2.33	46.79	54	-7.21
5350	63.65	PK	182	1.4	V	-2.33	61.32	74	-12.68
5350	48.90	AV	182	1.4	V	-2.33	46.57	54	-7.43
5460	63.67	PK	246	1.4	H	-2.26	61.41	74	-12.59
5460	48.44	AV	246	1.4	H	-2.26	46.18	54	-7.82
5460	63.37	PK	259	2.3	V	-2.26	61.11	74	-12.89
5460	48.57	AV	259	2.3	V	-2.26	46.31	54	-7.69
10480	51.95	PK	201	1.7	H	8.56	60.51	68.2	-7.69
10480	51.84	PK	261	1.7	V	8.56	60.40	68.2	-7.80

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N20									
5180MHz									
4500	64.69	PK	29	1	H	-4.72	59.97	74	-14.03
4500	48.39	AV	29	1	H	-4.72	43.67	54	-10.33
4500	64.77	PK	47	1	V	-4.72	60.05	74	-13.95
4500	48.79	AV	47	1	V	-4.72	44.07	54	-9.93
5150	66.67	PK	91	1.2	H	-2.73	63.94	74	-10.06
5150	50.07	AV	91	1.2	H	-2.73	47.34	54	-6.66
5150	65.77	PK	224	2.5	V	-2.73	63.04	74	-10.96
5150	49.29	AV	224	2.5	V	-2.73	46.56	54	-7.44
10360	52.67	PK	110	1.1	H	8.12	60.79	68.2	-7.41
10360	51.26	PK	42	1.1	V	8.12	59.38	68.2	-8.82
5200MHz									
10400	52.49	PK	159	1.7	H	8.24	60.73	68.2	-7.47
10400	51.24	PK	6	1.7	V	8.24	59.48	68.2	-8.72
5240MHz									
5350	63.97	PK	345	1.7	H	-2.33	61.64	74	-12.36
5350	49.27	AV	345	1.7	H	-2.33	46.94	54	-7.06
5350	63.54	PK	266	1.4	V	-2.33	61.21	74	-12.79
5350	48.79	AV	266	1.4	V	-2.33	46.46	54	-7.54
5460	63.67	PK	80	1.3	H	-2.26	61.41	74	-12.59
5460	48.33	AV	80	1.3	H	-2.26	46.07	54	-7.93
5460	63.60	PK	294	2	V	-2.26	61.34	74	-12.66
5460	48.29	AV	294	2	V	-2.26	46.03	54	-7.97
10480	51.61	PK	271	1.7	H	8.56	60.17	68.2	-8.03
10480	51.74	PK	258	1.7	V	8.56	60.30	68.2	-7.90

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40									
5190MHz									
4500	64.62	PK	240	1.7	H	-4.72	59.90	74	-14.10
4500	48.52	AV	240	1.7	H	-4.72	43.80	54	-10.20
4500	64.49	PK	152	2	V	-4.72	59.77	74	-14.23
4500	48.54	AV	152	2	V	-4.72	43.82	54	-10.18
5150	70.78	PK	8	1.1	H	-2.73	68.05	74	-5.95
5150	51.50	AV	8	1.1	H	-2.73	48.77	54	-5.23
5150	66.94	PK	234	2.2	V	-2.73	64.21	74	-9.79
5150	48.94	AV	234	2.2	V	-2.73	46.21	54	-7.79
10380	51.80	PK	191	2.4	H	8.18	59.98	68.2	-8.22
10380	52.05	PK	112	2.4	V	8.18	60.23	68.2	-7.97
5230MHz									
5350	64.86	PK	189	1.6	H	-2.33	62.53	74	-11.47
5350	49.35	AV	189	1.6	H	-2.33	47.02	54	-6.98
5350	63.56	PK	348	1.2	V	-2.33	61.23	74	-12.77
5350	48.50	AV	348	1.2	V	-2.33	46.17	54	-7.83
5460	63.53	PK	51	1.3	H	-2.26	61.27	74	-12.73
5460	48.60	AV	51	1.3	H	-2.26	46.34	54	-7.66
5460	63.47	PK	230	1.1	V	-2.26	61.21	74	-12.79
5460	48.66	AV	230	1.1	V	-2.26	46.40	54	-7.60
10460	52.00	PK	68	1.7	H	8.47	60.47	68.2	-7.73
10460	51.64	PK	218	1.7	V	8.47	60.11	68.2	-8.09

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5180MHz									
4500	64.58	PK	222	1.7	H	-4.72	59.86	74	-14.14
4500	48.48	AV	222	1.7	H	-4.72	43.76	54	-10.24
4500	64.45	PK	295	1.6	V	-4.72	59.73	74	-14.27
4500	48.57	AV	295	1.6	V	-4.72	43.85	54	-10.15
5150	66.02	PK	88	1.2	H	-2.73	63.29	74	-10.71
5150	50.03	AV	88	1.2	H	-2.73	47.30	54	-6.70
5150	65.56	PK	316	2	V	-2.73	62.83	74	-11.17
5150	49.52	AV	316	2	V	-2.73	46.79	54	-7.21
10360	51.83	PK	81	1.8	H	8.12	59.95	68.2	-8.25
10360	52.18	PK	348	1.8	V	8.12	60.30	68.2	-7.90
5200MHz									
10400	51.71	PK	324	1.3	H	8.24	59.95	68.2	-8.25
10400	52.05	PK	58	1.3	V	8.24	60.29	68.2	-7.91
5240MHz									
5350	64.46	PK	7	1.4	H	-2.33	62.13	74	-11.87
5350	49.11	AV	7	1.4	H	-2.33	46.78	54	-7.22
5350	63.67	PK	262	1.1	V	-2.33	61.34	74	-12.66
5350	48.86	AV	262	1.1	V	-2.33	46.53	54	-7.47
5460	63.64	PK	330	1.8	H	-2.26	61.38	74	-12.62
5460	48.52	AV	330	1.8	H	-2.26	46.26	54	-7.74
5460	63.56	PK	281	2	V	-2.26	61.30	74	-12.70
5460	48.66	AV	281	2	V	-2.26	46.40	54	-7.60
10480	51.65	PK	120	1.7	H	8.56	60.21	68.2	-7.99
10480	51.51	PK	155	1.7	V	8.56	60.07	68.2	-8.13

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5190MHz									
4500	65.15	PK	122	2.1	H	-4.72	60.43	74	-13.57
4500	48.81	AV	122	2.1	H	-4.72	44.09	54	-9.91
4500	64.52	PK	286	2.3	V	-4.72	59.80	74	-14.20
4500	48.39	AV	286	2.3	V	-4.72	43.67	54	-10.33
5150	66.95	PK	237	1.3	H	-2.73	64.22	74	-9.78
5150	50.94	AV	237	1.3	H	-2.73	48.21	54	-5.79
5150	65.41	PK	214	1.9	V	-2.73	62.68	74	-11.32
5150	49.16	AV	214	1.9	V	-2.73	46.43	54	-7.57
10380	51.99	PK	243	2.4	H	8.18	60.17	68.2	-8.03
10380	51.64	PK	186	2.4	V	8.18	59.82	68.2	-8.38
5230MHz									
5350	64.78	PK	352	2.4	H	-2.33	62.45	74	-11.55
5350	49.24	AV	352	2.4	H	-2.33	46.91	54	-7.09
5350	63.61	PK	317	2.2	V	-2.33	61.28	74	-12.72
5350	48.53	AV	317	2.2	V	-2.33	46.20	54	-7.80
5460	63.72	PK	218	1.1	H	-2.26	61.46	74	-12.54
5460	48.65	AV	218	1.1	H	-2.26	46.39	54	-7.61
5460	63.27	PK	130	1.5	V	-2.26	61.01	74	-12.99
5460	48.67	AV	130	1.5	V	-2.26	46.41	54	-7.59
10460	51.83	PK	103	1.7	H	8.47	60.30	68.2	-7.90
10460	51.89	PK	109	1.7	V	8.47	60.36	68.2	-7.84

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
	Reading (dBµV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5210MHz									
4500	64.45	PK	243	1.7	H	-4.72	59.73	74	-14.27
4500	49.60	AV	243	1.7	H	-4.72	44.88	54	-9.12
4500	64.68	PK	310	1.2	V	-4.72	59.96	74	-14.04
4500	49.69	AV	310	1.2	V	-4.72	44.97	54	-9.03
5150	70.94	PK	47	2.3	H	-2.73	68.21	74	-5.79
5150	50.92	AV	47	2.3	H	-2.73	48.19	54	-5.81
5150	66.79	PK	104	1.4	V	-2.73	64.06	74	-9.94
5150	50.43	AV	104	1.4	V	-2.73	47.70	54	-6.30
5350	64.88	PK	258	2.1	H	-2.33	62.55	74	-11.45
5350	49.27	AV	258	2.1	H	-2.33	46.94	54	-7.06
5350	63.93	PK	86	1.1	V	-2.33	61.60	74	-12.40
5350	48.84	AV	86	1.1	V	-2.33	46.51	54	-7.49
5460	63.65	PK	278	1.6	H	-2.26	61.39	74	-12.61
5460	48.51	AV	278	1.6	H	-2.26	46.25	54	-7.75
5460	63.50	PK	139	1.1	V	-2.26	61.24	74	-12.76
5460	48.73	AV	139	1.1	V	-2.26	46.47	54	-7.53
10420	52.17	PK	320	1.7	H	8.32	60.49	68.2	-7.71
10420	51.52	PK	350	1.7	V	8.32	59.84	68.2	-8.36

5250-5350 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5260MHz									
4500	63.47	PK	117	1.7	H	-4.72	58.75	74	-15.25
4500	49.60	AV	117	1.7	H	-4.72	44.88	54	-9.12
4500	63.42	PK	254	1.6	V	-4.72	58.70	74	-15.30
4500	49.58	AV	254	1.6	V	-4.72	44.86	54	-9.14
5150	63.95	PK	344	2.2	H	-2.73	61.22	74	-12.78
5150	48.96	AV	344	2.2	H	-2.73	46.23	54	-7.77
5150	63.87	PK	217	1.3	V	-2.73	61.14	74	-12.86
5150	48.92	AV	217	1.3	V	-2.73	46.19	54	-7.81
10520	52.00	PK	81	2	H	8.65	60.65	68.2	-7.55
10520	51.31	PK	54	2	V	8.65	59.96	68.2	-8.24
5280MHz									
10560	52.61	PK	214	1.7	H	8.69	61.3	68.2	-6.90
10560	52.24	PK	36	1.7	V	8.69	60.93	68.2	-7.27
5320MHz									
5350	64.34	PK	158	1	H	-2.33	62.01	74	-11.99
5350	49.24	AV	158	1	H	-2.33	46.91	54	-7.09
5350	63.75	PK	152	1.9	V	-2.33	61.42	74	-12.58
5350	48.50	AV	152	1.9	V	-2.33	46.17	54	-7.83
5460	63.45	PK	107	1.8	H	-2.26	61.19	74	-12.81
5460	48.74	AV	107	1.8	H	-2.26	46.48	54	-7.52
5460	63.65	PK	349	2.2	V	-2.26	61.39	74	-12.61
5460	48.71	AV	349	2.2	V	-2.26	46.45	54	-7.55
10640	52.44	PK	9	2.1	H	8.92	61.36	74	-12.64
10640	39.05	AV	313	2.1	H	8.92	47.97	54	-6.03
10640	52.13	PK	220	2.3	V	8.92	61.05	74	-12.95
10640	39.17	AV	343	2.3	V	8.92	48.09	54	-5.91

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N20									
5260MHz									
4500	63.43	PK	100	1.4	H	-4.72	58.71	74	-15.29
4500	49.78	AV	100	1.4	H	-4.72	45.06	54	-8.94
4500	63.78	PK	135	2.2	V	-4.72	59.06	74	-14.94
4500	49.85	AV	135	2.2	V	-4.72	45.13	54	-8.87
5150	63.89	PK	149	1.9	H	-2.73	61.16	74	-12.84
5150	48.80	AV	149	1.9	H	-2.73	46.07	54	-7.93
5150	63.85	PK	67	1.7	V	-2.73	61.12	74	-12.88
5150	49.05	AV	67	1.7	V	-2.73	46.32	54	-7.68
10520	52.30	PK	205	1.3	H	8.65	60.95	68.2	-7.25
10520	51.91	PK	31	1.3	V	8.65	60.56	68.2	-7.64
5280MHz									
10560	52.75	PK	288	1	H	8.69	61.44	68.2	-6.76
10560	51.92	PK	201	1	V	8.69	60.61	68.2	-7.59
5320MHz									
5350	64.40	PK	48	1.6	H	-2.33	62.07	74	-11.93
5350	49.33	AV	48	1.6	H	-2.33	47.00	54	-7.00
5350	63.78	PK	130	1.3	V	-2.33	61.45	74	-12.55
5350	48.53	AV	130	1.3	V	-2.33	46.20	54	-7.80
5460	63.58	PK	191	1.8	H	-2.26	61.32	74	-12.68
5460	48.69	AV	191	1.8	H	-2.26	46.43	54	-7.57
5460	63.59	PK	321	1.5	V	-2.26	61.33	74	-12.67
5460	48.30	AV	321	1.5	V	-2.26	46.04	54	-7.96
10640	52.33	PK	165	1.3	H	8.92	61.25	74	-12.75
10640	39.03	AV	59	1.3	H	8.92	47.95	54	-6.05
10640	52.39	PK	157	1	V	8.92	61.31	74	-12.69
10640	39.08	AV	196	1	V	8.92	48.00	54	-6.00

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40									
5270MHz									
4500	63.96	PK	14	1.2	H	-4.72	59.24	74	-14.76
4500	49.62	AV	14	1.2	H	-4.72	44.90	54	-9.10
4500	64.03	PK	265	2.5	V	-4.72	59.31	74	-14.69
4500	49.61	AV	265	2.5	V	-4.72	44.89	54	-9.11
5150	64.24	PK	50	2.2	H	-2.73	61.51	74	-12.49
5150	48.96	AV	50	2.2	H	-2.73	46.23	54	-7.77
5150	63.75	PK	113	1.4	V	-2.73	61.02	74	-12.98
5150	48.93	AV	113	1.4	V	-2.73	46.20	54	-7.80
10540	51.96	PK	265	2.4	H	8.65	60.61	68.2	-7.59
10540	51.82	PK	175	2.4	V	8.65	60.47	68.2	-7.73
5310MHz									
5350	71.82	PK	270	2.5	H	-2.33	69.49	74	-4.51
5350	51.25	AV	270	2.5	H	-2.33	48.92	54	-5.08
5350	67.12	PK	242	2.3	V	-2.33	64.79	74	-9.21
5350	50.06	AV	242	2.3	V	-2.33	47.73	54	-6.27
5460	63.42	PK	275	1.6	H	-2.26	61.16	74	-12.84
5460	48.66	AV	275	1.6	H	-2.26	46.40	54	-7.60
5460	63.43	PK	266	2.4	V	-2.26	61.17	74	-12.83
5460	48.43	AV	266	2.4	V	-2.26	46.17	54	-7.83
10620	52.38	PK	279	2	H	8.89	61.27	74	-12.73
10620	39.20	AV	133	2	H	8.89	48.09	54	-5.91
10620	52.13	PK	203	1.9	V	8.89	61.02	74	-12.98
10620	39.19	AV	356	1.9	V	8.89	48.08	54	-5.92

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5260MHz									
4500	63.69	PK	304	1	H	-4.72	58.97	74	-15.03
4500	49.62	AV	304	1	H	-4.72	44.90	54	-9.10
4500	63.47	PK	52	1.6	V	-4.72	58.75	74	-15.25
4500	49.43	AV	52	1.6	V	-4.72	44.71	54	-9.29
5150	64.30	PK	53	2.1	H	-2.73	61.57	74	-12.43
5150	49.12	AV	53	2.1	H	-2.73	46.39	54	-7.61
5150	63.68	PK	291	1.7	V	-2.73	60.95	74	-13.05
5150	48.65	AV	291	1.7	V	-2.73	45.92	54	-8.08
10520	51.77	PK	322	2.3	H	8.65	60.42	68.2	-7.78
10520	52.00	PK	188	2.3	V	8.65	60.65	68.2	-7.55
5280MHz									
10560	52.40	PK	217	2.2	H	8.69	61.09	68.2	-7.11
10560	51.77	PK	245	2.2	V	8.69	60.46	68.2	-7.74
5320MHz									
5350	66.20	PK	288	2.3	H	-2.33	63.87	74	-10.13
5350	51.28	AV	288	2.3	H	-2.33	48.95	54	-5.05
5350	65.29	PK	185	1	V	-2.33	62.96	74	-11.04
5350	50.26	AV	185	1	V	-2.33	47.93	54	-6.07
5460	63.62	PK	19	1.1	H	-2.26	61.36	74	-12.64
5460	48.24	AV	19	1.1	H	-2.26	45.98	54	-8.02
5460	63.46	PK	111	1.3	V	-2.26	61.20	74	-12.80
5460	48.69	AV	111	1.3	V	-2.26	46.43	54	-7.57
10640	52.28	PK	30	2	H	8.92	61.20	74	-12.80
10640	39.22	AV	259	2	H	8.92	48.14	54	-5.86
10640	52.19	PK	178	1.7	V	8.92	61.11	74	-12.89
10640	38.93	AV	241	1.7	V	8.92	47.85	54	-6.15

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5270MHz									
4500	64.19	PK	75	2	H	-4.72	59.47	74	-14.53
4500	49.60	AV	75	2	H	-4.72	44.88	54	-9.12
4500	64.11	PK	141	1.9	V	-4.72	59.39	74	-14.61
4500	49.80	AV	141	1.9	V	-4.72	45.08	54	-8.92
5150	64.24	PK	39	2.2	H	-2.73	61.51	74	-12.49
5150	49.05	AV	39	2.2	H	-2.73	46.32	54	-7.68
5150	64.05	PK	197	1.8	V	-2.73	61.32	74	-12.68
5150	48.97	AV	197	1.8	V	-2.73	46.24	54	-7.76
10540	52.23	PK	237	2	H	8.65	60.88	68.2	-7.32
10540	51.15	PK	342	2	V	8.65	59.80	68.2	-8.40
5310MHz									
5350	71.00	PK	100	1.2	H	-2.33	68.67	74	-5.33
5350	51.09	AV	100	1.2	H	-2.33	48.76	54	-5.24
5350	67.04	PK	66	2.2	V	-2.33	64.71	74	-9.29
5350	50.03	AV	66	2.2	V	-2.33	47.70	54	-6.30
5460	63.32	PK	257	2.3	H	-2.26	61.06	74	-12.94
5460	48.54	AV	257	2.3	H	-2.26	46.28	54	-7.72
5460	63.43	PK	154	2.5	V	-2.26	61.17	74	-12.83
5460	48.70	AV	154	2.5	V	-2.26	46.44	54	-7.56
10620	52.39	PK	315	1.7	H	8.89	61.28	74	-12.72
10620	39.15	AV	126	1.7	H	8.89	48.04	54	-5.96
10620	52.28	PK	111	2.1	V	8.89	61.17	74	-12.83
10620	39.12	AV	240	2.1	V	8.89	48.01	54	-5.99

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5290MHz									
4500	63.96	PK	144	1.5	H	-4.72	59.24	74	-14.76
4500	49.80	AV	144	1.5	H	-4.72	45.08	54	-8.92
4500	63.57	PK	201	2.2	V	-4.72	58.85	74	-15.15
4500	49.58	AV	201	2.2	V	-4.72	44.86	54	-9.14
5150	64.24	PK	344	1.7	H	-2.73	61.51	74	-12.49
5150	48.71	AV	344	1.7	H	-2.73	45.98	54	-8.02
5150	63.83	PK	221	2.5	V	-2.73	61.10	74	-12.90
5150	49.02	AV	221	2.5	V	-2.73	46.29	54	-7.71
5350	71.63	PK	171	1.9	H	-2.33	69.30	74	-4.70
5350	53.46	AV	171	1.9	H	-2.33	51.13	54	-2.87
5350	67.46	PK	207	1.8	V	-2.33	65.13	74	-8.87
5350	51.24	AV	207	1.8	V	-2.33	48.91	54	-5.09
5460	63.37	PK	231	2.3	H	-2.26	61.11	74	-12.89
5460	48.40	AV	231	2.3	H	-2.26	46.14	54	-7.86
5460	63.59	PK	154	2.2	V	-2.26	61.33	74	-12.67
5460	48.32	AV	154	2.2	V	-2.26	46.06	54	-7.94
10580	52.29	PK	88	2.1	H	8.77	61.06	68.2	-7.14
10580	52.13	PK	190	2.1	V	8.77	60.9	68.2	-7.30

5470-5725MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5500MHz									
5460	62.28	PK	312	2.3	H	-2.26	60.02	74	-13.98
5460	48.46	AV	312	2.3	H	-2.26	46.20	54	-7.80
5460	62.12	PK	226	1.9	V	-2.26	59.86	74	-14.14
5460	48.35	AV	226	1.9	V	-2.26	46.09	54	-7.91
5470	63.85	PK	95	1.7	H	-2.22	61.63	68.2	-6.57
5470	63.63	PK	111	1.4	V	-2.22	61.41	68.2	-6.79
11000	51.64	PK	37	2.2	H	9.67	61.31	74	-12.69
11000	38.41	AV	87	2.2	H	9.67	48.08	54	-5.92
11000	51.95	PK	205	2	V	9.67	61.62	74	-12.38
11000	38.56	AV	297	2	V	9.67	48.23	54	-5.77
5580MHz									
11160	53.25	PK	227	1.9	H	8.68	61.93	74	-12.07
11160	39.70	AV	309	1.9	H	8.68	48.38	54	-5.62
11160	53.57	PK	65	1.7	V	8.68	62.25	74	-11.75
11160	39.86	AV	332	1.7	V	8.68	48.54	54	-5.46
5700MHz									
5725	64.13	PK	180	1.6	H	-1.96	62.17	68.2	-6.03
5725	64.00	PK	230	1.5	V	-1.96	62.04	68.2	-6.16
5745	61.21	PK	321	1	H	-1.91	59.30	68.2	-8.90
5745	61.04	PK	305	2.5	V	-1.91	59.13	68.2	-9.07
11400	55.15	PK	348	2.4	H	7.26	62.41	74	-11.59
11400	41.70	AV	294	2.4	H	7.26	48.96	54	-5.04
11400	55.52	PK	192	1.7	V	7.26	62.78	74	-11.22
11400	41.89	AV	120	1.7	V	7.26	49.15	54	-4.85

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N20									
5500MHz									
5460	62.40	PK	357	2.2	H	-2.26	60.14	74	-13.86
5460	48.55	AV	357	2.2	H	-2.26	46.29	54	-7.71
5460	62.27	PK	283	2.2	V	-2.26	60.01	74	-13.99
5460	48.43	AV	283	2.2	V	-2.26	46.17	54	-7.83
5470	64.12	PK	212	1.2	H	-2.22	61.90	68.2	-6.30
5470	63.97	PK	53	2	V	-2.22	61.75	68.2	-6.45
11000	51.88	PK	53	1.9	H	9.67	61.55	74	-12.45
11000	38.52	AV	272	1.9	H	9.67	48.19	54	-5.81
11000	52.13	PK	155	1.1	V	9.67	61.80	74	-12.20
11000	38.64	AV	264	1.1	V	9.67	48.31	54	-5.69
5580MHz									
11160	53.39	PK	56	2.3	H	8.68	62.07	74	-11.93
11160	39.77	AV	93	2.3	H	8.68	48.45	54	-5.55
11160	53.80	PK	109	1.6	V	8.68	62.48	74	-11.52
11160	39.96	AV	130	1.6	V	8.68	48.64	54	-5.36
5700MHz									
5725	66.36	PK	48	2.2	H	-1.96	64.40	68.2	-3.80
5725	65.80	PK	333	1.2	V	-1.96	63.84	68.2	-4.36
5745	62.94	PK	112	2.1	H	-1.91	61.03	68.2	-7.17
5745	62.37	PK	223	1.7	V	-1.91	60.46	68.2	-7.74
11400	55.20	PK	227	1.6	H	7.26	62.46	74	-11.54
11400	41.79	AV	213	1.6	H	7.26	49.05	54	-4.95
11400	55.62	PK	300	1.9	V	7.26	62.88	74	-11.12
11400	42.01	AV	212	1.9	V	7.26	49.27	54	-4.73

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40									
5510MHz									
5460	62.88	PK	356	1.7	H	-2.26	60.62	74	-13.38
5460	49.17	AV	356	1.7	H	-2.26	46.91	54	-7.09
5460	62.75	PK	326	1.1	V	-2.26	60.49	74	-13.51
5460	49.00	AV	326	1.1	V	-2.26	46.74	54	-7.26
5470	66.32	PK	104	1.5	H	-2.22	64.10	68.2	-4.10
5470	65.57	PK	108	2.4	V	-2.22	63.35	68.2	-4.85
11020	52.26	PK	321	2	H	9.57	61.83	74	-12.17
11020	38.85	AV	257	2	H	9.57	48.42	54	-5.58
11020	52.57	PK	101	1	V	9.57	62.14	74	-11.86
11020	38.98	AV	55	1	V	9.57	48.55	54	-5.45
5550MHz									
11100	52.48	PK	350	1.5	H	9.12	61.60	74	-12.40
11100	38.85	AV	189	1.5	H	9.12	47.97	54	-6.03
11100	52.74	PK	122	1	V	9.12	61.86	74	-12.14
11100	38.97	AV	208	1	V	9.12	48.09	54	-5.91
5670MHz									
5725	63.75	PK	48	2.2	H	-1.96	61.79	68.2	-6.41
5725	63.59	PK	163	2.3	V	-1.96	61.63	68.2	-6.57
5745	61.95	PK	354	1.2	H	-1.91	60.04	68.2	-8.16
5745	61.79	PK	231	2.4	V	-1.91	59.88	68.2	-8.32
11340	54.54	PK	57	1.1	H	7.67	62.21	74	-11.79
11340	40.79	AV	46	1.1	H	7.67	48.46	54	-5.54
11340	54.76	PK	302	2.5	V	7.67	62.43	74	-11.57
11340	40.93	AV	216	2.5	V	7.67	48.60	54	-5.40

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5500MHz									
5460	62.29	PK	172	1.3	H	-2.26	60.03	74	-13.97
5460	48.52	AV	172	1.3	H	-2.26	46.26	54	-7.74
5460	62.17	PK	358	2	V	-2.26	59.91	74	-14.09
5460	48.41	AV	358	2	V	-2.26	46.15	54	-7.85
5470	64.06	PK	80	1	H	-2.22	61.84	68.2	-6.36
5470	63.89	PK	275	1.9	V	-2.22	61.67	68.2	-6.53
11000	51.97	PK	317	1.6	H	9.67	61.64	74	-12.36
11000	38.52	AV	35	1.6	H	9.67	48.19	54	-5.81
11000	52.15	PK	145	1.8	V	9.67	61.82	74	-12.18
11000	38.70	AV	152	1.8	V	9.67	48.37	54	-5.63
5580MHz									
11160	53.16	PK	320	1.7	H	8.68	61.84	74	-12.16
11160	39.72	AV	293	1.7	H	8.68	48.40	54	-5.60
11160	53.31	PK	231	2	V	8.68	61.99	74	-12.01
11160	39.87	AV	299	2	V	8.68	48.55	54	-5.45
5700MHz									
5725	65.38	PK	87	2.4	H	-1.96	63.42	68.2	-4.78
5725	65.19	PK	287	1.1	V	-1.96	63.23	68.2	-4.97
5745	62.51	PK	65	1.7	H	-1.91	60.60	68.2	-7.60
5745	62.30	PK	320	1.3	V	-1.91	60.39	68.2	-7.81
11400	55.03	PK	203	1	H	7.26	62.29	74	-11.71
11400	41.82	AV	107	1	H	7.26	49.08	54	-4.92
11400	55.29	PK	29	2	V	7.26	62.55	74	-11.45
11400	41.96	AV	303	2	V	7.26	49.22	54	-4.78

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5510MHz									
5460	63.61	PK	156	2.5	H	-2.26	61.35	74	-12.65
5460	49.32	AV	156	2.5	H	-2.26	47.06	54	-6.94
5460	63.43	PK	259	1.6	V	-2.26	61.17	74	-12.83
5460	49.19	AV	259	1.6	V	-2.26	46.93	54	-7.07
5470	66.82	PK	249	2.1	H	-2.22	64.60	68.2	-3.60
5470	66.43	PK	189	2.4	V	-2.22	64.21	68.2	-3.99
11020	51.84	PK	91	2	H	9.57	61.41	74	-12.59
11020	38.95	AV	108	2	H	9.57	48.52	54	-5.48
11020	52.22	PK	62	2.3	V	9.57	61.79	74	-12.21
11020	39.13	AV	57	2.3	V	9.57	48.70	54	-5.30
5550MHz									
11100	52.57	PK	244	2.4	H	9.12	61.69	74	-12.31
11100	38.94	AV	104	2.4	H	9.12	48.06	54	-5.94
11100	52.85	PK	223	2	V	9.12	61.97	74	-12.03
11100	39.08	AV	185	2	V	9.12	48.20	54	-5.80
5670MHz									
5725	63.96	PK	165	1.2	H	-1.96	62.00	68.2	-6.20
5725	63.75	PK	359	2.3	V	-1.96	61.79	68.2	-6.41
5745	62.15	PK	75	2.3	H	-1.91	60.24	68.2	-7.96
5745	61.97	PK	311	1.2	V	-1.91	60.06	68.2	-8.14
11340	54.62	PK	359	1.7	H	7.67	62.29	74	-11.71
11340	40.86	AV	266	1.7	H	7.67	48.53	54	-5.47
11340	54.85	PK	52	2.2	V	7.67	62.52	74	-11.48
11340	41.03	AV	88	2.2	V	7.67	48.70	54	-5.30

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5530MHz									
5460	64.22	PK	132	2	H	-2.26	61.96	74	-12.04
5460	50.06	AV	132	2	H	-2.26	47.80	54	-6.20
5460	64.01	PK	204	1.5	V	-2.26	61.75	74	-12.25
5460	49.89	AV	204	1.5	V	-2.26	47.63	54	-6.37
5470	67.39	PK	231	2.3	H	-2.22	65.17	68.2	-3.03
5470	66.94	PK	176	2.3	V	-2.22	64.72	68.2	-3.48
11060	51.73	PK	344	2.1	H	9.37	61.10	74	-12.90
11060	39.77	AV	257	2.1	H	9.37	49.14	54	-4.86
11060	52.01	PK	45	2.4	V	9.37	61.38	74	-12.62
11060	39.90	AV	245	2.4	V	9.37	49.27	54	-4.73
5610MHz									
5725	64.23	PK	179	1.2	H	-1.96	62.27	68.2	-5.93
5725	64.00	PK	211	2.2	V	-1.96	62.04	68.2	-6.16
5745	62.27	PK	283	1.9	H	-1.91	60.36	68.2	-7.84
5745	62.11	PK	277	1.2	V	-1.91	60.20	68.2	-8.00
11220	53.94	PK	58	2	H	8.33	62.27	74	-11.73
11220	41.47	AV	87	2	H	8.33	49.80	54	-4.20
11220	54.31	PK	7	2	V	8.33	62.64	74	-11.36
11220	41.68	AV	90	2	V	8.33	50.01	54	-3.99

5725-5850 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5745MHz									
5650	63.14	PK	59	2.1	H	-1.95	61.19	68.2	-7.01
5700	63.92	PK	151	1.3	H	-2.02	61.90	105.2	-43.30
5720	65.71	PK	231	1.7	H	-1.97	63.74	110.8	-47.06
5725	71.77	PK	129	2	H	-1.96	69.81	122.2	-52.39
5650	63.03	PK	174	1.8	V	-1.95	61.08	68.2	-7.12
5700	63.62	PK	5	1.1	V	-2.02	61.60	105.2	-43.60
5720	64.76	PK	111	1.6	V	-1.97	62.79	110.8	-48.01
5725	70.63	PK	323	1.9	V	-1.96	68.67	122.2	-53.53
11490	54.56	PK	208	1.1	H	6.63	61.19	74	-12.81
11490	41.54	AV	22	1.1	H	6.63	48.17	54	-5.83
11490	54.93	PK	87	1.4	V	6.63	61.56	74	-12.44
11490	41.69	AV	200	1.4	V	6.63	48.32	54	-5.68
5785MHz									
11570	54.71	PK	157	1.2	H	6.59	61.30	74	-12.70
11570	41.67	AV	275	1.2	H	6.59	48.26	54	-5.74
11570	55.06	PK	110	2	V	6.59	61.65	74	-12.35
11570	41.82	AV	54	2	V	6.59	48.41	54	-5.59
5825MHz									
5850	68.26	PK	111	1.4	H	-1.81	66.45	122.2	-55.75
5855	66.12	PK	14	1.7	H	-1.82	64.30	110.8	-46.50
5875	65.30	PK	16	1.2	H	-1.84	63.46	105.2	-41.74
5925	64.80	PK	275	1.9	H	-1.82	62.98	68.2	-5.22
5850	66.87	PK	36	2	V	-1.81	65.06	122.2	-57.14
5855	65.67	PK	284	2.3	V	-1.82	63.85	110.8	-46.95
5875	64.84	PK	67	1.4	V	-1.84	63.00	105.2	-42.20
5925	64.69	PK	287	1.9	V	-1.82	62.87	68.2	-5.33
11650	53.91	PK	317	1.8	H	6.77	60.68	74	-13.32
11650	40.78	AV	143	1.8	H	6.77	47.55	54	-6.45
11650	54.07	PK	232	2.1	V	6.77	60.84	74	-13.16
11650	40.94	AV	80	2.1	V	6.77	47.71	54	-6.29

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N20									
5745MHz									
5650	63.32	PK	162	1.6	H	-1.95	61.37	68.2	-6.83
5700	64.04	PK	16	1	H	-2.02	62.02	105.2	-43.18
5720	66.16	PK	16	2.4	H	-1.97	64.19	110.8	-46.61
5725	72.26	PK	67	2.3	H	-1.96	70.30	122.2	-51.90
5650	63.20	PK	344	1.5	V	-1.95	61.25	68.2	-6.95
5700	63.85	PK	48	1.7	V	-2.02	61.83	105.2	-43.37
5720	65.45	PK	262	1.9	V	-1.97	63.48	110.8	-47.32
5725	71.00	PK	197	1	V	-1.96	69.04	122.2	-53.16
11490	54.69	PK	199	2.3	H	6.63	61.32	74	-12.68
11490	41.63	AV	12	2.3	H	6.63	48.26	54	-5.74
11490	55.01	PK	283	1.3	V	6.63	61.64	74	-12.36
11490	41.78	AV	332	1.3	V	6.63	48.41	54	-5.59
5785MHz									
11570	54.77	PK	5	1.3	H	6.59	61.36	74	-12.64
11570	41.75	AV	197	1.3	H	6.59	48.34	54	-5.66
11570	55.14	PK	228	1.2	V	6.59	61.73	74	-12.27
11570	41.86	AV	52	1.2	V	6.59	48.45	54	-5.55
5825MHz									
5850	68.87	PK	306	2.2	H	-1.81	67.06	122.2	-55.14
5855	66.79	PK	280	1.2	H	-1.82	64.97	110.8	-45.83
5875	65.57	PK	359	2	H	-1.84	63.73	105.2	-41.47
5925	64.91	PK	154	2.1	H	-1.82	63.09	68.2	-5.11
5850	67.60	PK	92	2.1	V	-1.81	65.79	122.2	-56.41
5855	65.78	PK	152	2	V	-1.82	63.96	110.8	-46.84
5875	65.32	PK	263	1.7	V	-1.84	63.48	105.2	-41.72
5925	64.77	PK	160	1.5	V	-1.82	62.95	68.2	-5.25
11650	53.96	PK	170	1.1	H	6.77	60.73	74	-13.27
11650	40.85	AV	353	1.1	H	6.77	47.62	54	-6.38
11650	54.11	PK	328	1.5	V	6.77	60.88	74	-13.12
11650	41.07	AV	101	1.5	V	6.77	47.84	54	-6.16

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11N40									
5755MHz									
5650	63.46	PK	123	1.8	H	-1.95	61.51	68.2	-6.69
5700	64.72	PK	339	1.3	H	-2.02	62.70	105.2	-42.50
5720	73.60	PK	21	2.1	H	-1.97	71.63	110.8	-39.17
5725	75.30	PK	141	1.7	H	-1.96	73.34	122.2	-48.86
5650	63.35	PK	240	1.1	V	-1.95	61.40	68.2	-6.80
5700	64.44	PK	45	2.2	V	-2.02	62.42	105.2	-42.78
5720	71.66	PK	126	1.4	V	-1.97	69.69	110.8	-41.11
5725	74.04	PK	235	1.2	V	-1.96	72.08	122.2	-50.12
11510	54.63	PK	269	1.7	H	6.59	61.22	74	-12.78
11510	41.54	AV	324	1.7	H	6.59	48.13	54	-5.87
11510	54.87	PK	166	1.2	V	6.59	61.46	74	-12.54
11510	41.75	AV	123	1.2	V	6.59	48.34	54	-5.66
5795MHz									
5850	67.10	PK	221	1.5	H	-1.81	65.29	122.2	-56.91
5855	65.30	PK	139	1.2	H	-1.82	63.48	110.8	-47.32
5875	64.69	PK	69	1.4	H	-1.84	62.85	105.2	-42.35
5925	64.36	PK	283	1.4	H	-1.82	62.54	68.2	-5.66
5850	66.63	PK	258	2.1	V	-1.81	64.82	122.2	-57.38
5855	65.11	PK	138	1.2	V	-1.82	63.29	110.8	-47.51
5875	64.50	PK	334	2.4	V	-1.84	62.66	105.2	-42.54
5925	64.25	PK	8	1	V	-1.82	62.43	68.2	-5.77
11590	54.70	PK	277	1.4	H	6.57	61.27	74	-12.73
11590	41.59	AV	270	1.4	H	6.57	48.16	54	-5.84
11590	54.91	PK	165	2.2	V	6.57	61.48	74	-12.52
11590	41.84	AV	309	2.2	V	6.57	48.41	54	-5.59

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5745MHz									
5650	63.48	PK	21	1.6	H	-1.95	61.53	68.2	-6.67
5700	64.14	PK	353	1.1	H	-2.02	62.12	105.2	-43.08
5720	66.57	PK	202	2.4	H	-1.97	64.60	110.8	-46.20
5725	73.40	PK	297	2.5	H	-1.96	71.44	122.2	-50.76
5650	63.35	PK	119	1.2	V	-1.95	61.40	68.2	-6.80
5700	64.01	PK	108	1.4	V	-2.02	61.99	105.2	-43.21
5720	66.05	PK	267	2.4	V	-1.97	64.08	110.8	-46.72
5725	71.83	PK	37	2.5	V	-1.96	69.87	122.2	-52.33
11490	54.84	PK	190	1.1	H	6.63	61.47	74	-12.53
11490	41.73	AV	150	1.1	H	6.63	48.36	54	-5.64
11490	55.12	PK	185	1.8	V	6.63	61.75	74	-12.25
11490	41.90	AV	278	1.8	V	6.63	48.53	54	-5.47
5785MHz									
11570	54.91	PK	114	1.5	H	6.59	61.50	74	-12.50
11570	41.82	AV	302	1.5	H	6.59	48.41	54	-5.59
11570	55.08	PK	42	2.3	V	6.59	61.67	74	-12.33
11570	41.94	AV	29	2.3	V	6.59	48.53	54	-5.47
5825MHz									
5850	68.20	PK	43	1.4	H	-1.81	66.39	122.2	-55.81
5855	65.48	PK	266	1.3	H	-1.82	63.66	110.8	-47.14
5875	64.99	PK	243	1.9	H	-1.84	63.15	105.2	-42.05
5925	64.65	PK	177	2.4	H	-1.82	62.83	68.2	-5.37
5850	67.11	PK	328	1.5	V	-1.81	65.30	122.2	-56.90
5855	65.31	PK	292	2.5	V	-1.82	63.49	110.8	-47.31
5875	64.79	PK	33	1.5	V	-1.84	62.95	105.2	-42.25
5925	64.49	PK	85	2.4	V	-1.82	62.67	68.2	-5.53
11650	53.99	PK	234	1.6	H	6.77	60.76	74	-13.24
11650	40.92	AV	152	1.6	H	6.77	47.69	54	-6.31
11650	54.18	PK	92	1.7	V	6.77	60.95	74	-13.05
11650	41.11	AV	311	1.7	V	6.77	47.88	54	-6.12

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5755MHz									
5650	64.67	PK	62	2.2	H	-1.95	62.72	68.2	-5.48
5700	65.41	PK	329	1.3	H	-2.02	63.39	105.2	-41.81
5720	74.47	PK	271	2.2	H	-1.97	72.50	110.8	-38.30
5725	76.63	PK	145	1.2	H	-1.96	74.67	122.2	-47.53
5650	64.55	PK	181	2.1	V	-1.95	62.60	68.2	-5.60
5700	65.16	PK	203	1.3	V	-2.02	63.14	105.2	-42.06
5720	72.60	PK	348	1.7	V	-1.97	70.63	110.8	-40.17
5725	74.65	PK	350	1.9	V	-1.96	72.69	122.2	-49.51
11510	54.81	PK	57	1.6	H	6.59	61.40	74	-12.60
11510	41.66	AV	48	1.6	H	6.59	48.25	54	-5.75
11510	55.00	PK	292	2.1	V	6.59	61.59	74	-12.41
11510	41.88	AV	226	2.1	V	6.59	48.47	54	-5.53
5795MHz									
5850	68.54	PK	161	1.2	H	-1.81	66.73	122.2	-55.47
5855	65.76	PK	304	1.6	H	-1.82	63.94	110.8	-46.86
5875	65.13	PK	17	1.6	H	-1.84	63.29	105.2	-41.91
5925	64.57	PK	67	1.6	H	-1.82	62.75	68.2	-5.45
5850	67.51	PK	142	1.6	V	-1.81	65.70	122.2	-56.50
5855	65.57	PK	233	1.5	V	-1.82	63.75	110.8	-47.05
5875	64.90	PK	328	1.1	V	-1.84	63.06	105.2	-42.14
5925	64.40	PK	1	1.3	V	-1.82	62.58	68.2	-5.62
11590	54.85	PK	236	1.2	H	6.57	61.42	74	-12.58
11590	41.80	AV	128	1.2	H	6.57	48.37	54	-5.63
11590	54.99	PK	269	1.1	V	6.57	61.56	74	-12.44
11590	41.97	AV	109	1.1	V	6.57	48.54	54	-5.46

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Absolute Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5775MHz									
5650	63.79	PK	63	1.9	H	-1.95	61.84	68.2	-6.36
5700	68.95	PK	40	1	H	-2.02	66.93	105.2	-38.27
5720	71.97	PK	11	1.1	H	-1.97	70.00	110.8	-40.80
5725	72.68	PK	246	1.4	H	-1.96	70.72	122.2	-51.48
5650	63.64	PK	295	2	V	-1.95	61.69	68.2	-6.51
5700	67.82	PK	96	1.4	V	-2.02	65.80	105.2	-39.40
5720	70.48	PK	90	2	V	-1.97	68.51	110.8	-42.29
5725	71.28	PK	53	1.4	V	-1.96	69.32	122.2	-52.88
5850	69.36	PK	244	1.9	H	-1.81	67.55	122.2	-54.65
5855	67.56	PK	308	1.1	H	-1.82	65.74	110.8	-45.06
5875	65.83	PK	241	2.1	H	-1.84	63.99	105.2	-41.21
5925	65.07	PK	165	1.7	H	-1.82	63.25	68.2	-4.95
5850	68.27	PK	255	1.4	V	-1.81	66.46	122.2	-55.74
5855	67.07	PK	251	1.9	V	-1.82	65.25	110.8	-45.55
5875	65.58	PK	187	2.4	V	-1.84	63.74	105.2	-41.46
5925	64.85	PK	352	2.1	V	-1.82	63.03	68.2	-5.17
11550	54.89	PK	329	2.1	H	6.61	61.50	74	-12.50
11550	43.00	AV	330	2.1	H	6.61	49.61	54	-4.39
11550	55.22	PK	136	1.7	V	6.61	61.83	74	-12.17
11550	43.16	AV	141	1.7	V	6.61	49.77	54	-4.23

Note:

Corrected Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor

Corrected Amplitude = Corrected Factor + Reading

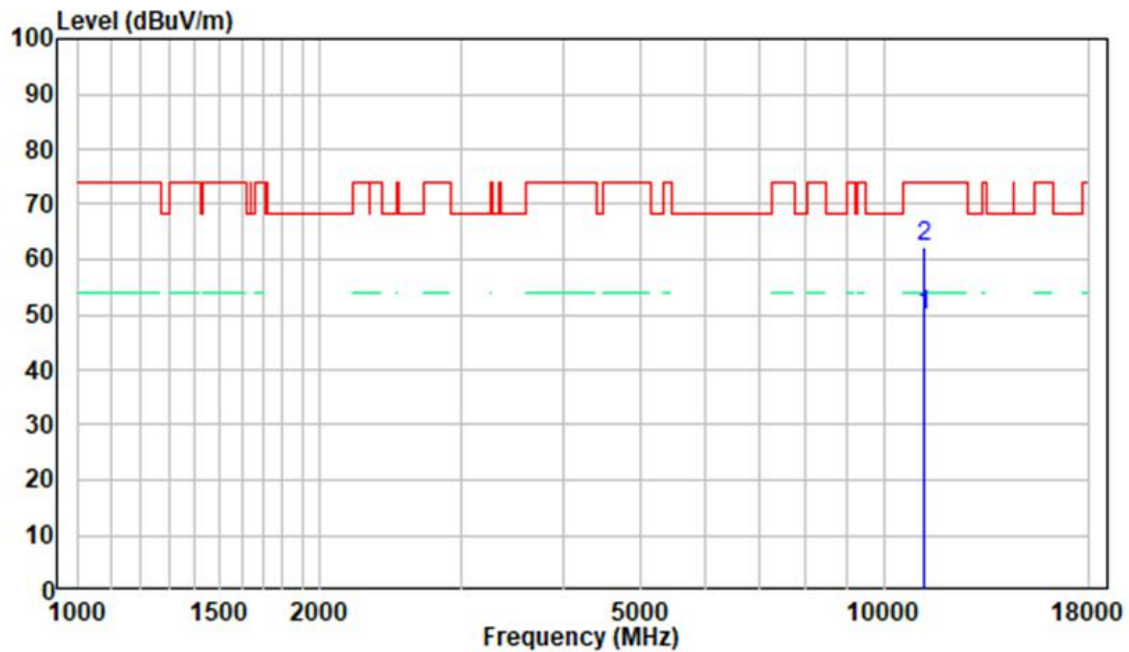
Margin = Corrected. Amplitude - Limit

The other spurious emission which is in the noise floor level was not recorded.

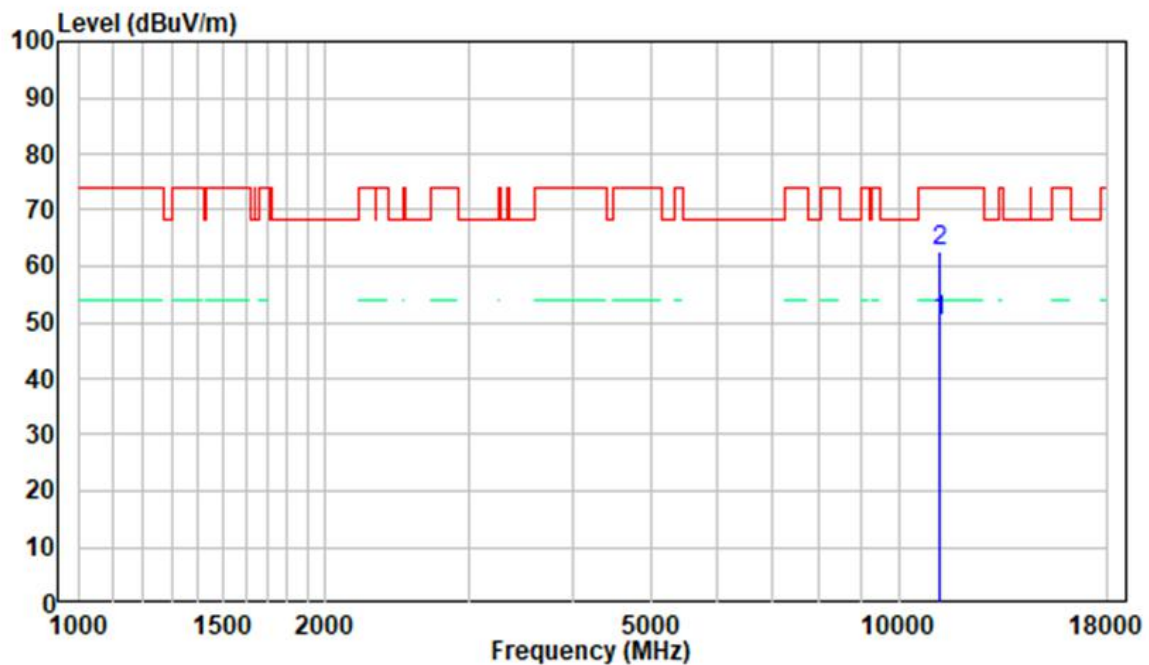
1 GHz - 18 GHz: (Pre-Scan plots)

802.11 ac80, 5610MHz

Horizontal



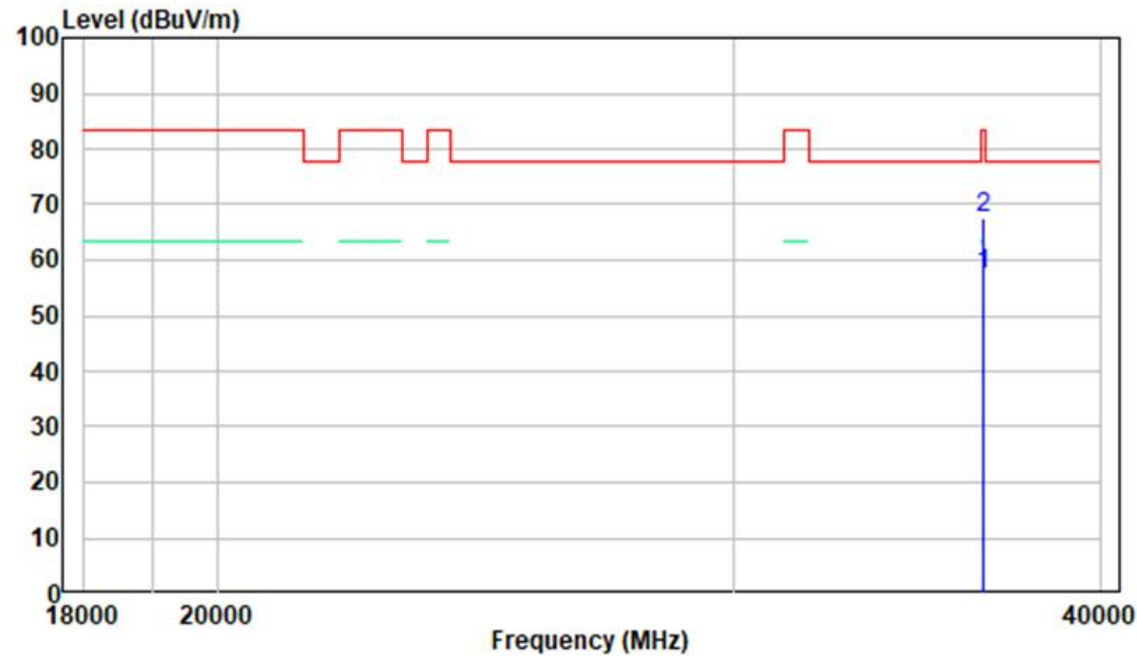
Vertical



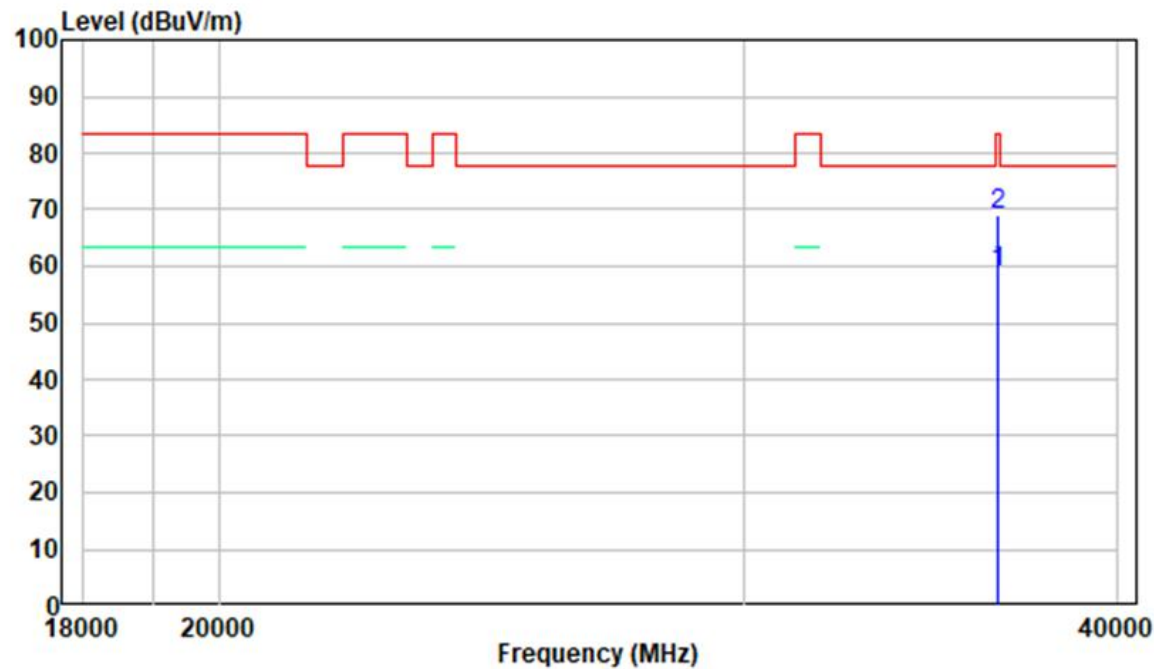
18-40GHz: (Pre-Scan plots)

802.11 ac80, 5610MHz

Horizontal



Vertical



FCC §15.407(a),(e) – 26 dB & 6dB EMISSION BANDWIDTH

Applicable Standard

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band are made over a reference bandwidth of 500 kHz or the 26 dB emission bandwidth of the device, whichever is less. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure

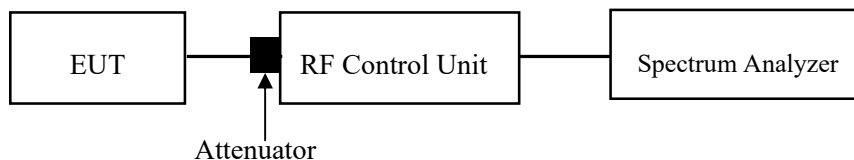
1. Emission Bandwidth (EBW)

- Set RBW = approximately 1% of the emission bandwidth.
- Set the VBW > RBW.
- Detector = Peak.
- Trace mode = max hold.
- Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

2. Minimum Emission Bandwidth for the band 5.725-5.85 GHz

Section 15.407(e) specifies the minimum 6 dB emission bandwidth of at least 500 KHz for the band 5.725-5.85 GHz. The following procedure shall be used for measuring this bandwidth:

- Set RBW = 100 kHz.
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
- Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Allow the trace to stabilize.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.



Test Data**Environmental Conditions**

Temperature:	26~28 °C
Relative Humidity:	58~65%
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang from 2022-10-27 to 2022-11-28.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

FCC §15.407(a) – CONDUCTED TRANSMITTER OUTPUT POWER

Applicable Standard

For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

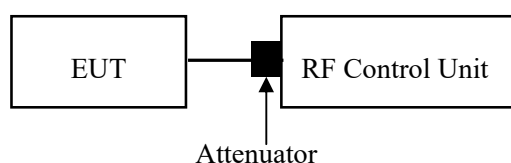
For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

- c. Place the EUT on a bench and set it in transmitting mode.
- d. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.
- e. Add a correction factor to the display.



Note: the RF control unit has a built-in power sensor.

Test Data**Environmental Conditions**

Temperature:	26~28 °C
Relative Humidity:	58~65%
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang from 2022-10-27 to 2022-11-28.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

FCC §15.407(a) - POWER SPECTRAL DENSITY

For client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

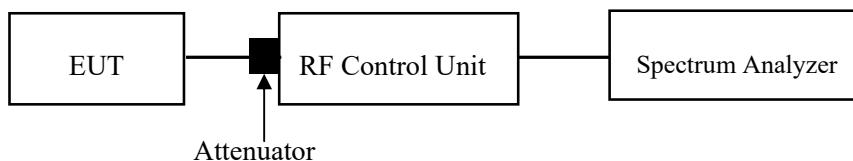
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

Test Procedure

For devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz, the above procedures make use of 1 MHz RBW to satisfy directly the 1 MHz reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 GHz, the rules specify a measurement bandwidth of 500 kHz. Many spectrum analyzers do not have 500 kHz RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 MHz, or 500 kHz, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (i.e., 1 MHz, or 500 kHz). If measurements are performed using a reduced resolution bandwidth ($< 1 \text{ MHz}$, or $< 500 \text{ kHz}$) and integrated over 1 MHz, or 500 kHz bandwidth, the following adjustments to the procedures apply:

- Set $\text{RBW} \geq 1/T$, where T is defined in ANSI C63.10-2013 Section 12.2 a).
- Set $\text{VBW} \geq 3 \text{ RBW}$.
- If measurement bandwidth of Maximum PSD is specified in 500 kHz, add $10 \log (500 \text{ kHz}/\text{RBW})$ to the measured result, whereas $\text{RBW} (< 500 \text{ kHz})$ is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
- If measurement bandwidth of Maximum PSD is specified in 1 MHz, add $10 \log (1\text{MHz}/\text{RBW})$ to the measured result, whereas $\text{RBW} (< 1 \text{ MHz})$ is the reduced resolution bandwidth of spectrum analyzer set during measurement.
- Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.



Test Data**Environmental Conditions**

Temperature:	26 °C
Relative Humidity:	65%
ATM Pressure:	101.0 kPa

The testing was performed by Cat Kang on 2022-10-27.

EUT operation mode: Transmitting

Test Result: Pass

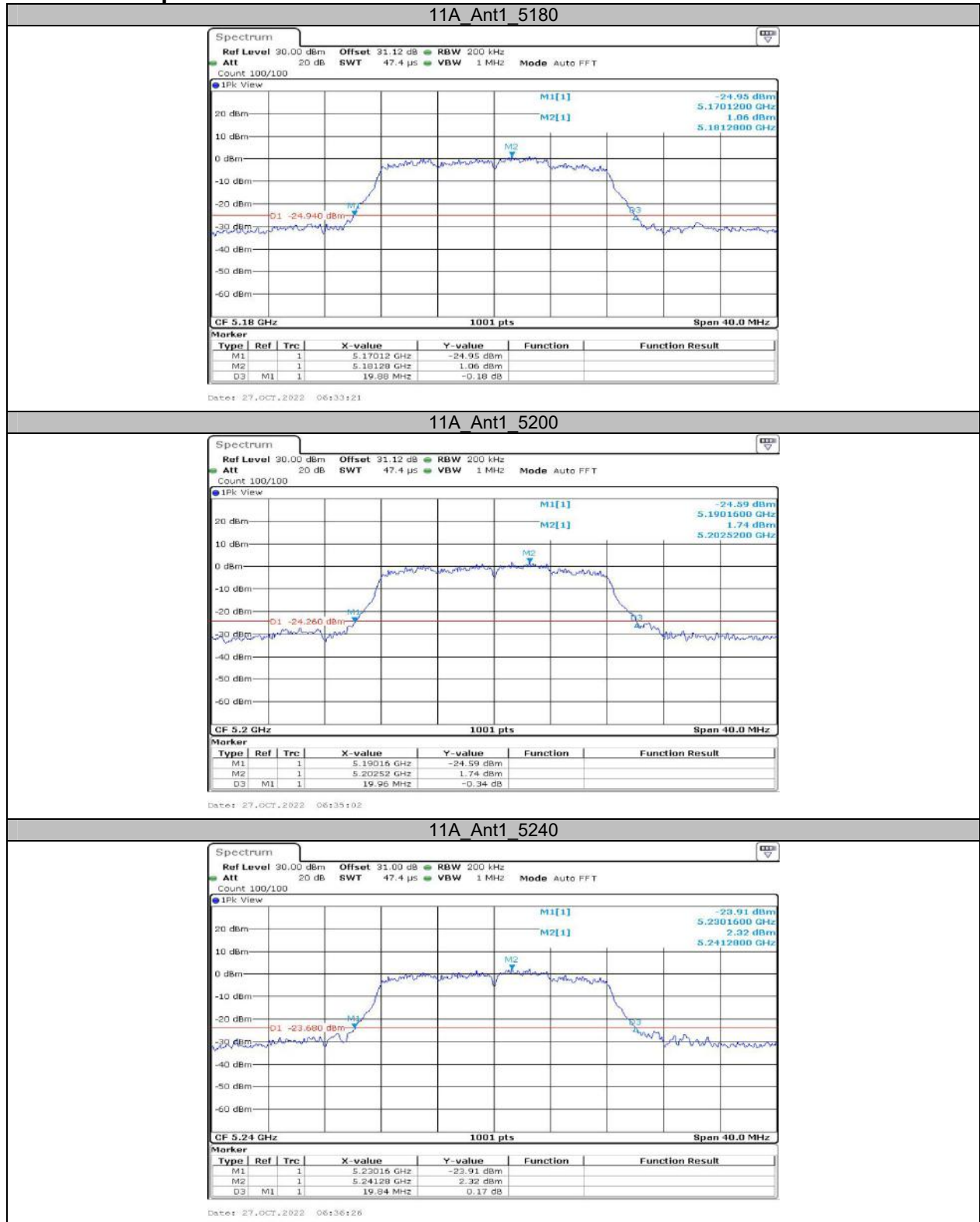
Please refer to the Appendix.

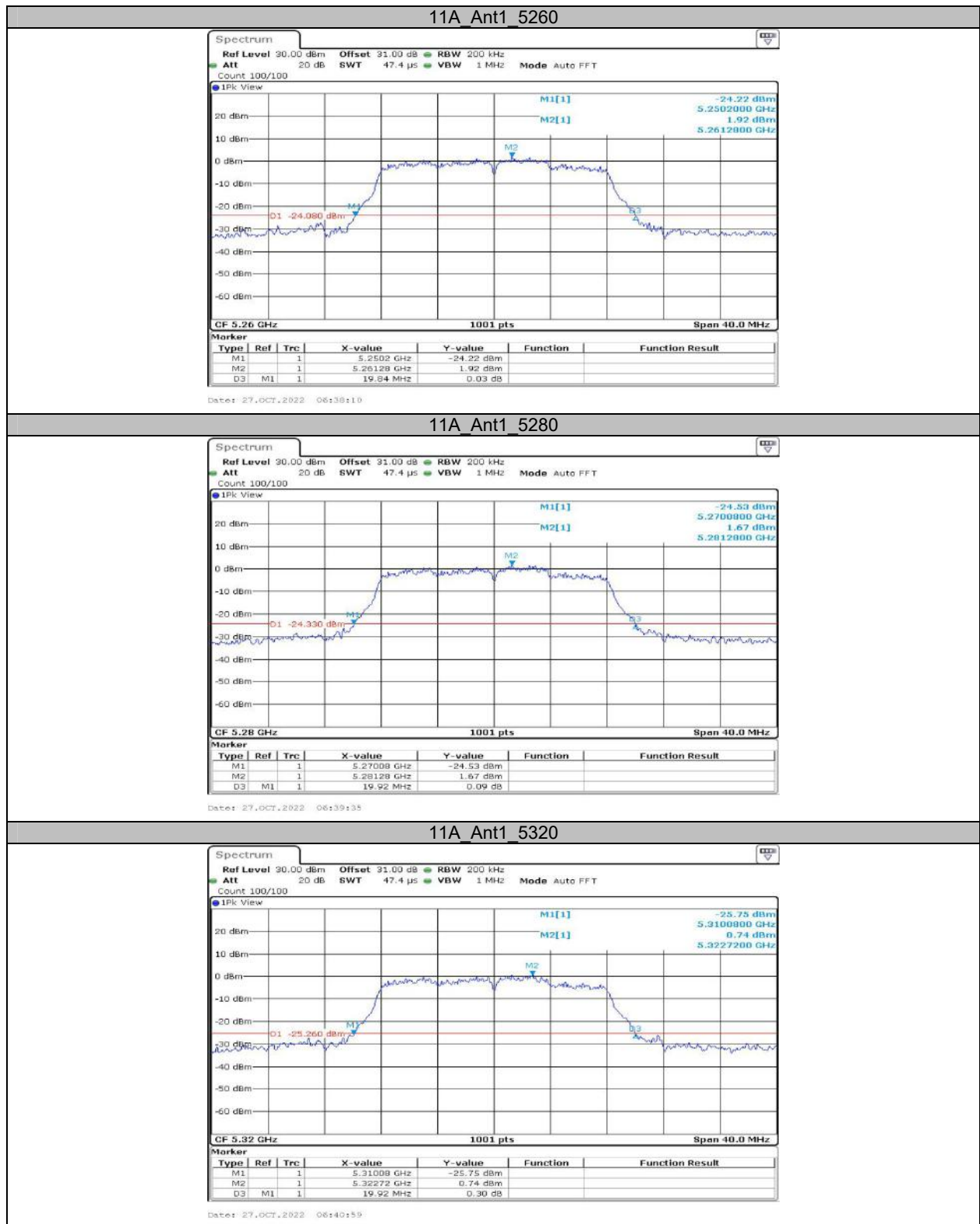
APPENDIX

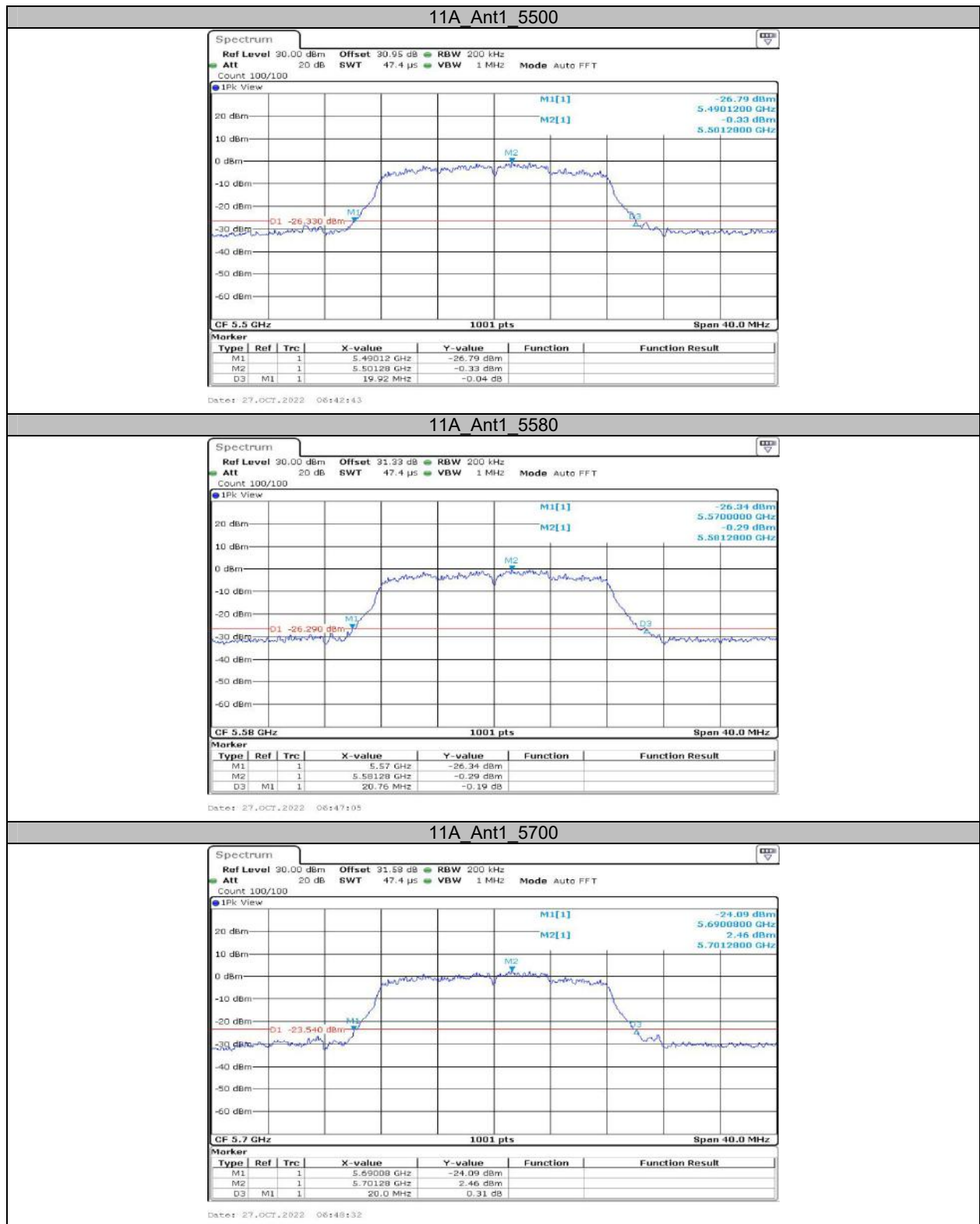
Appendix A1: Emission Bandwidth Test Result

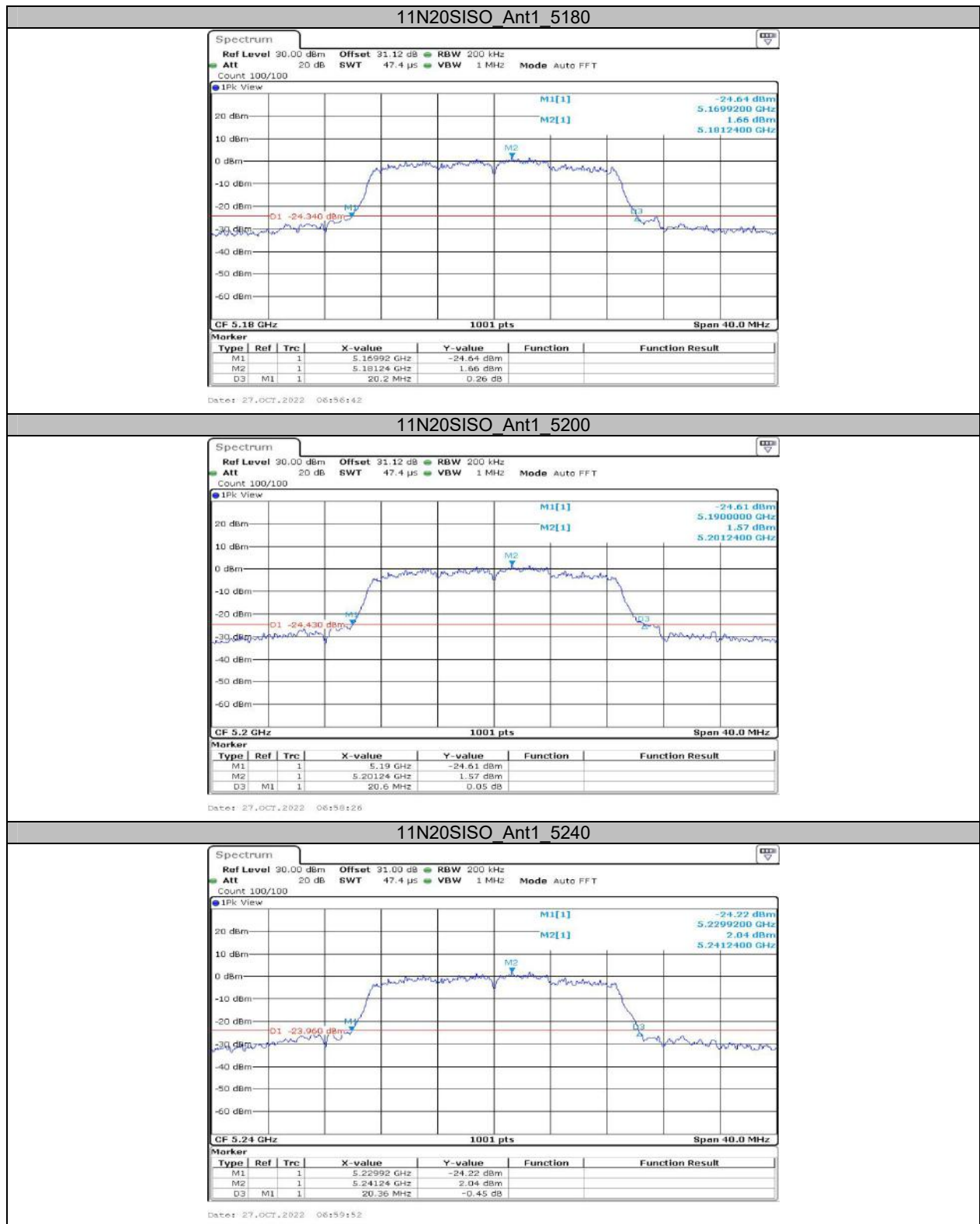
Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	19.88	5170.12	5190.00	---	---
		5200	19.96	5190.16	5210.12	---	---
		5240	19.84	5230.16	5250.00	---	---
		5260	19.84	5250.20	5270.04	---	---
		5280	19.92	5270.08	5290.00	---	---
		5320	19.92	5310.08	5330.00	---	---
		5500	19.92	5490.12	5510.04	---	---
		5580	20.76	5570.00	5590.76	---	---
		5700	20.00	5690.08	5710.08	---	---
11N20SISO	Ant1	5180	20.20	5169.92	5190.12	---	---
		5200	20.60	5190.00	5210.60	---	---
		5240	20.36	5229.92	5250.28	---	---
		5260	21.44	5249.92	5271.36	---	---
		5280	21.32	5269.44	5290.76	---	---
		5320	20.72	5309.52	5330.24	---	---
		5500	20.24	5489.96	5510.20	---	---
		5580	21.68	5569.88	5591.56	---	---
		5700	20.32	5689.84	5710.16	---	---
11N40SISO	Ant1	5190	41.12	5169.52	5210.64	---	---
		5230	41.28	5209.52	5250.80	---	---
		5270	41.36	5249.36	5290.72	---	---
		5310	41.20	5289.44	5330.64	---	---
		5510	40.96	5489.44	5530.40	---	---
		5550	41.04	5529.68	5570.72	---	---
		5670	41.20	5649.68	5690.88	---	---
11AC20SISO	Ant1	5180	20.20	5169.92	5190.12	---	---
		5200	20.20	5190.00	5210.20	---	---
		5240	21.88	5229.88	5251.76	---	---
		5260	20.24	5249.88	5270.12	---	---
		5280	20.32	5269.84	5290.16	---	---
		5320	20.36	5309.88	5330.24	---	---
		5500	20.80	5490.04	5510.84	---	---
		5580	20.36	5569.96	5590.32	---	---
11AC40SISO	Ant1	5700	20.16	5690.00	5710.16	---	---
		5190	41.12	5169.52	5210.64	---	---
		5230	41.44	5209.36	5250.80	---	---
		5270	41.04	5249.44	5290.48	---	---
		5310	41.44	5289.20	5330.64	---	---
		5510	41.04	5489.68	5530.72	---	---
		5550	41.20	5529.60	5570.80	---	---
11AC80SISO	Ant1	5670	41.44	5649.52	5690.96	---	---
		5210	81.60	5169.36	5250.96	---	---
		5290	93.44	5237.36	5330.80	---	---
		5530	81.76	5489.20	5570.96	---	---
		5610	82.08	5569.36	5651.44	---	---

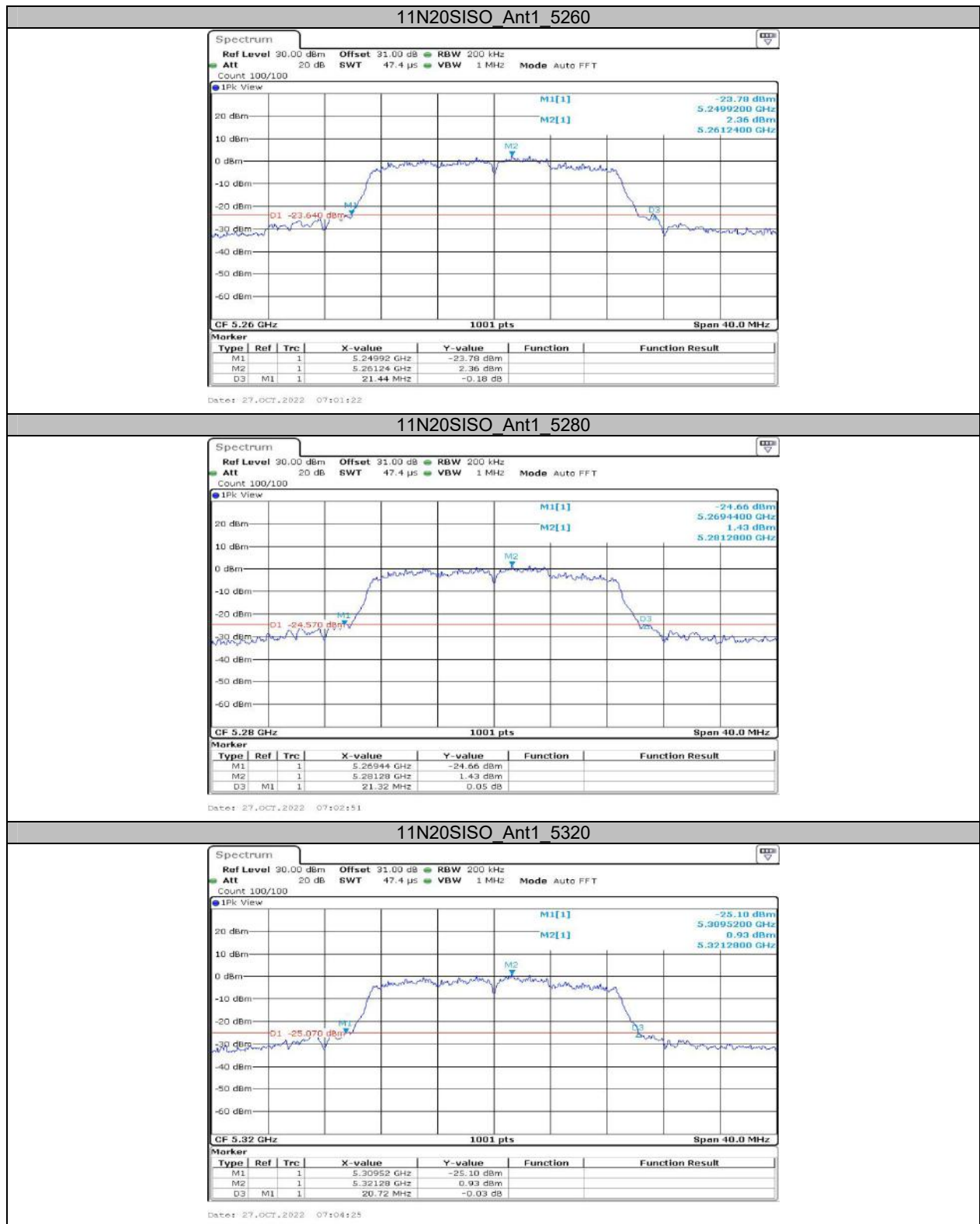
Test Graphs

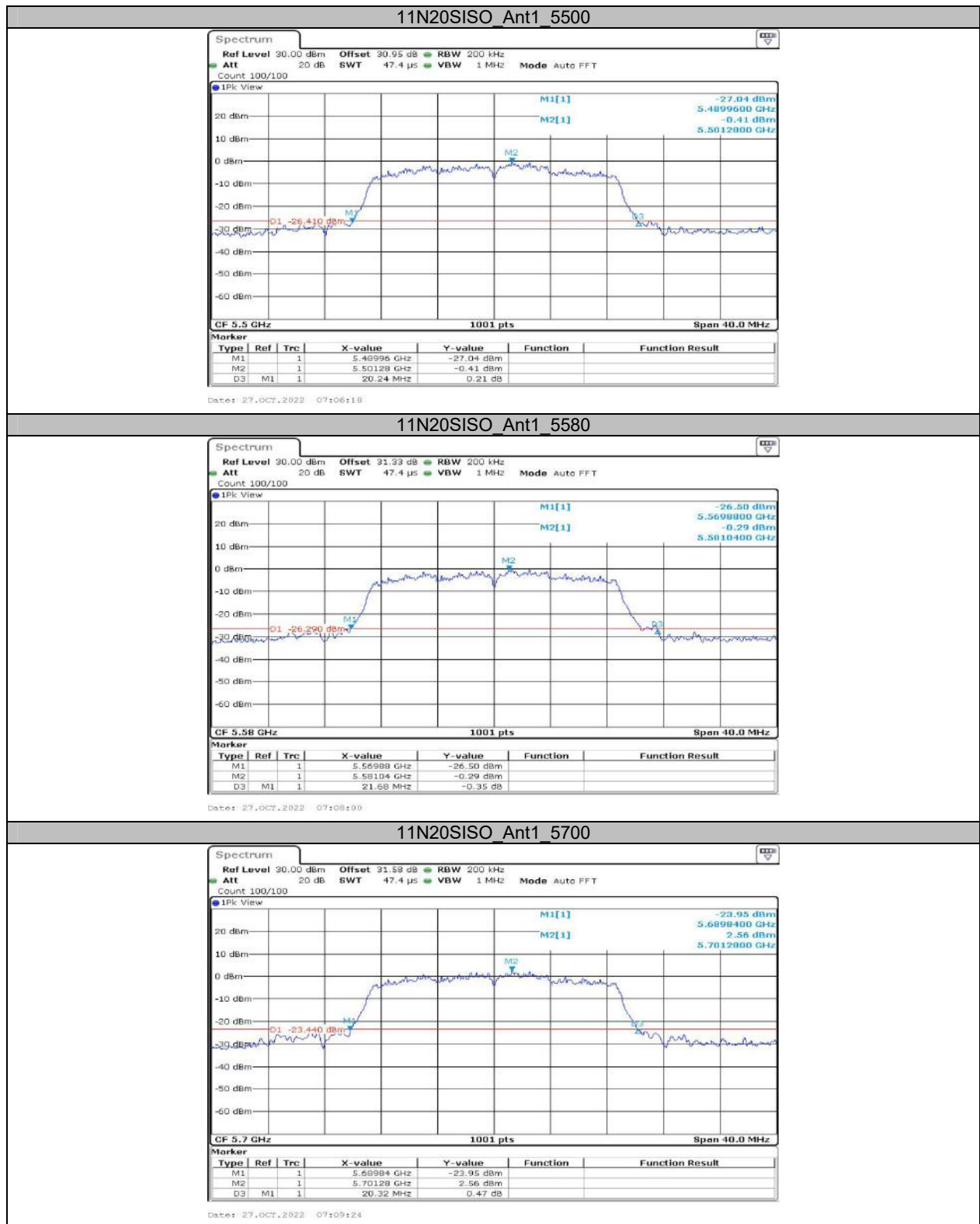


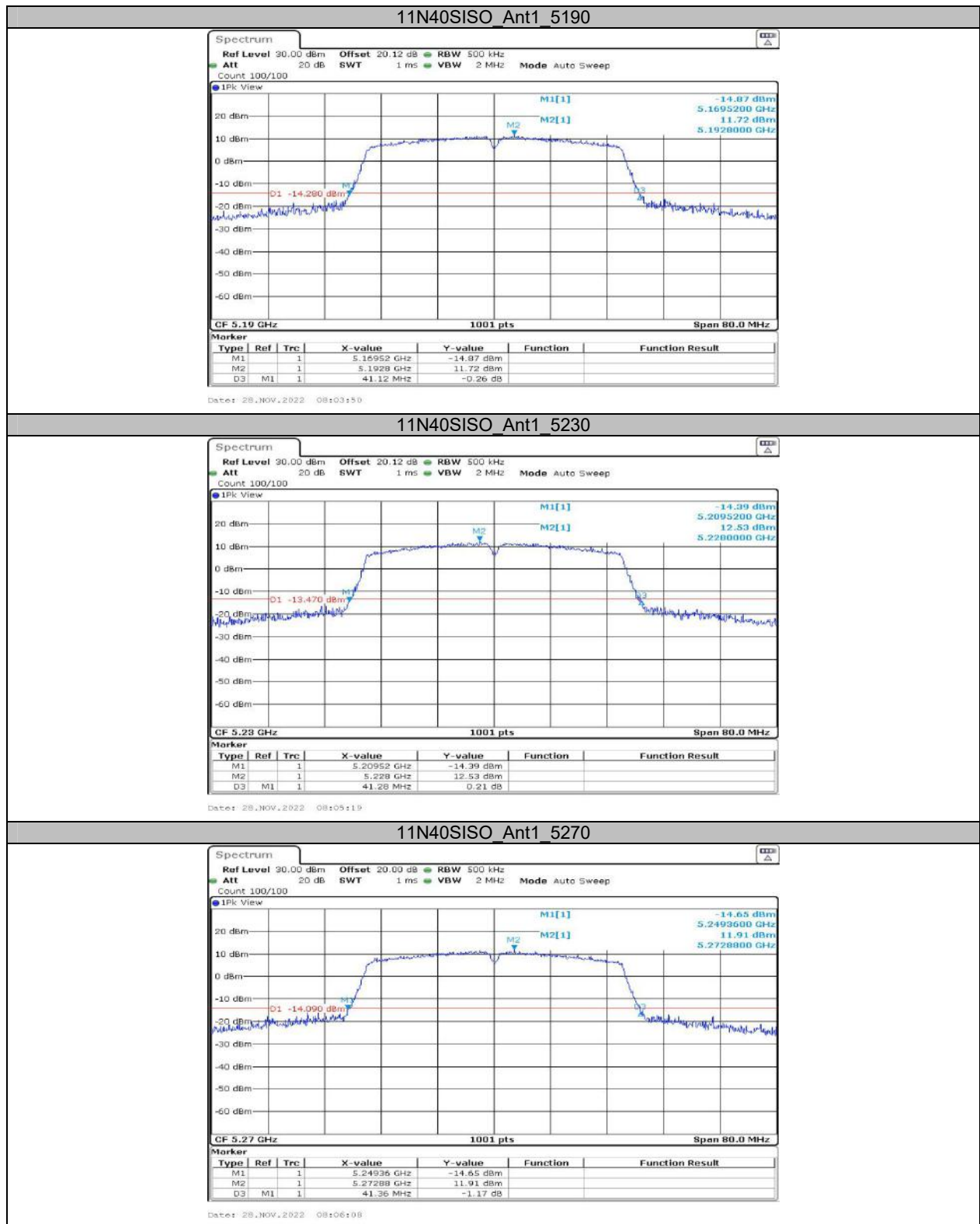


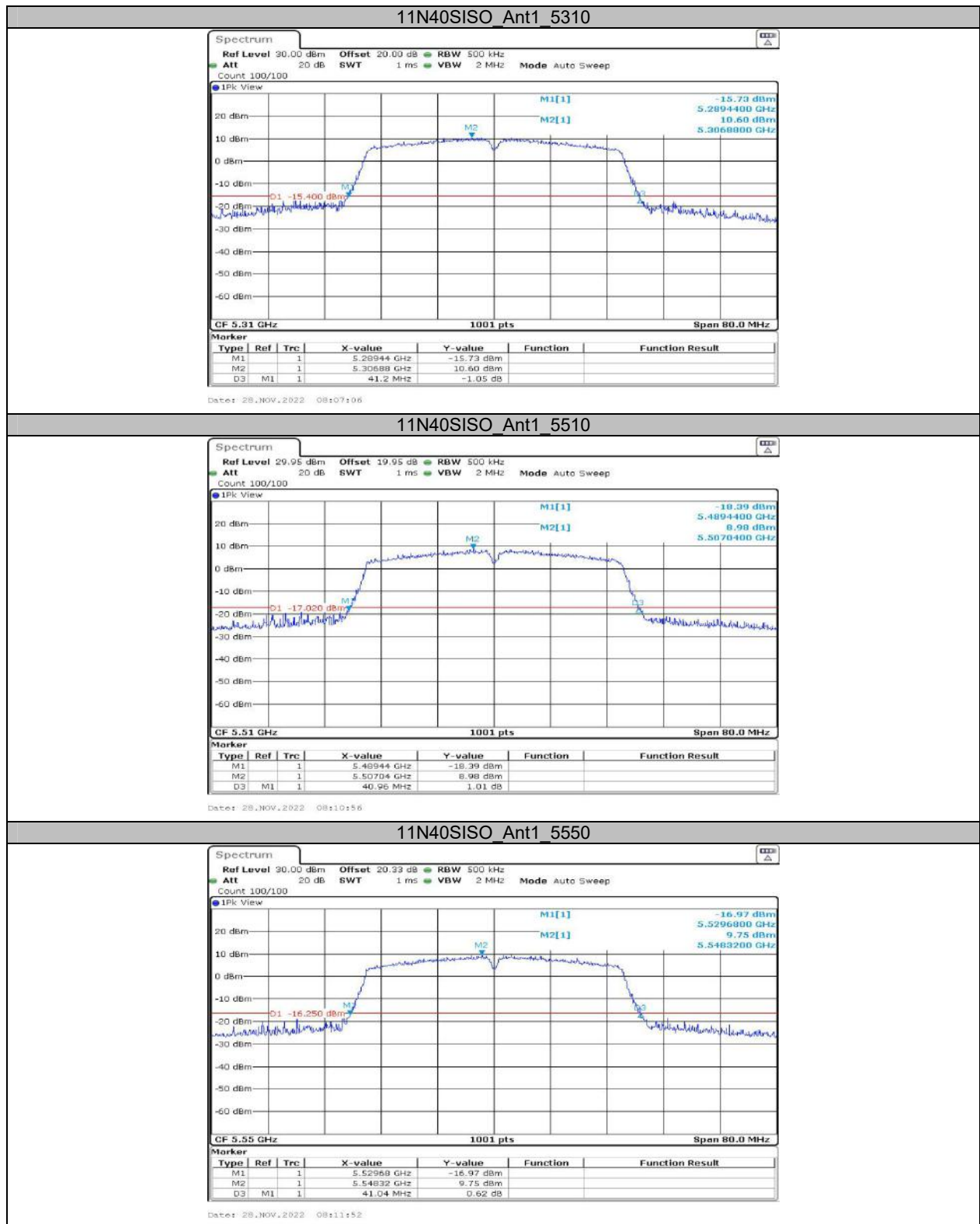


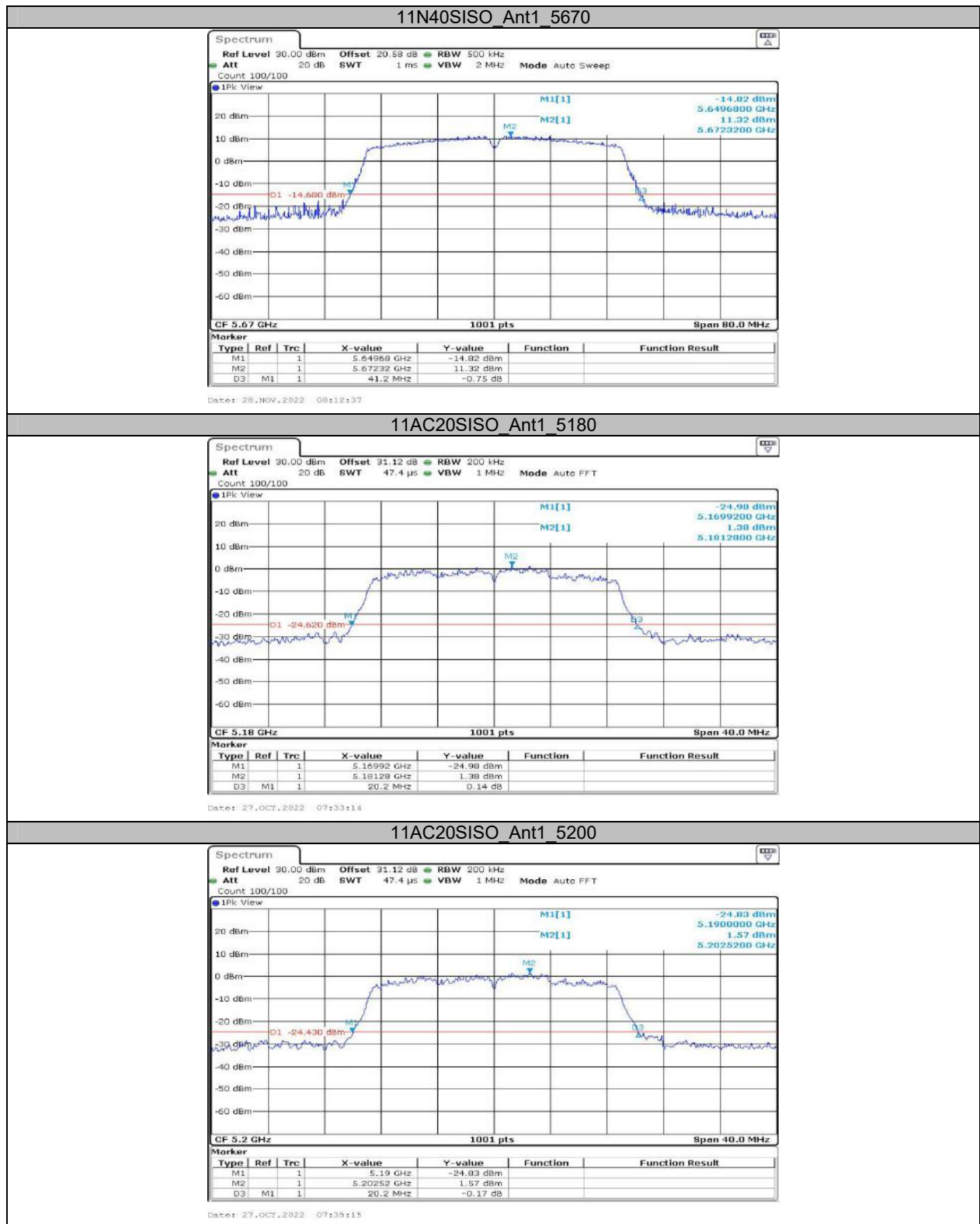


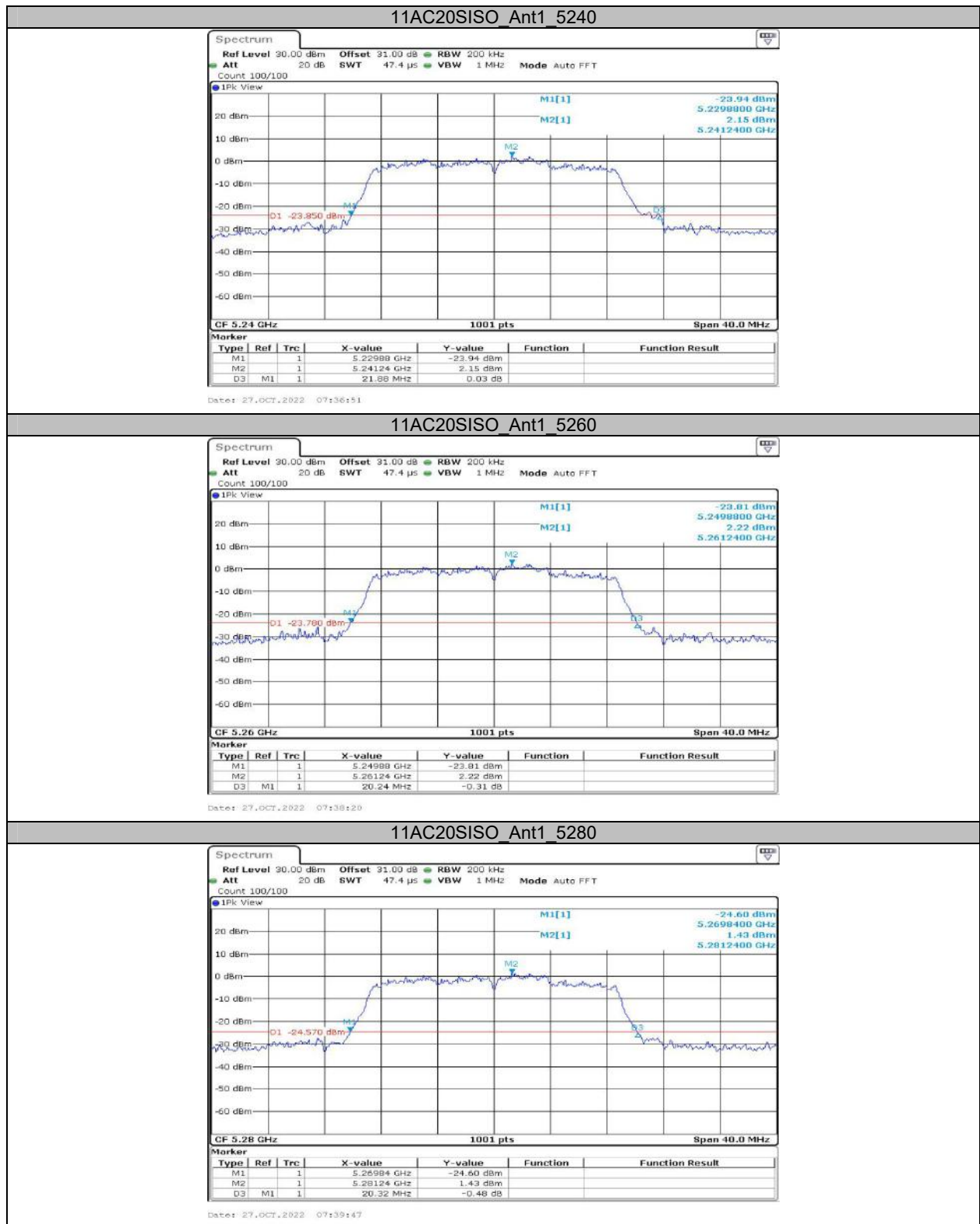




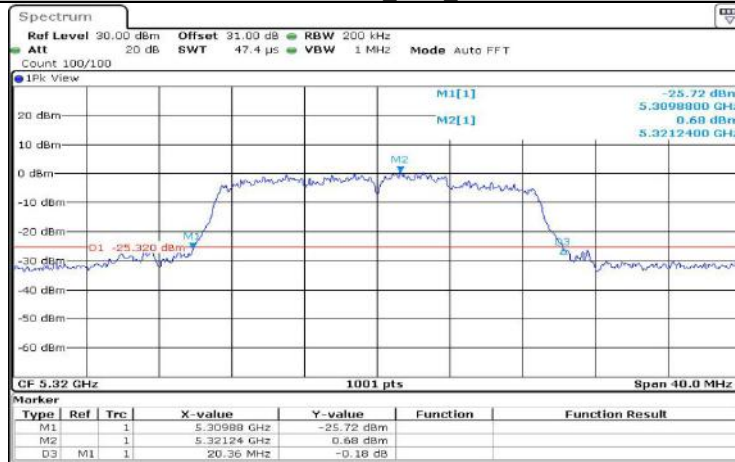








11AC20SISO_Ant1_5320



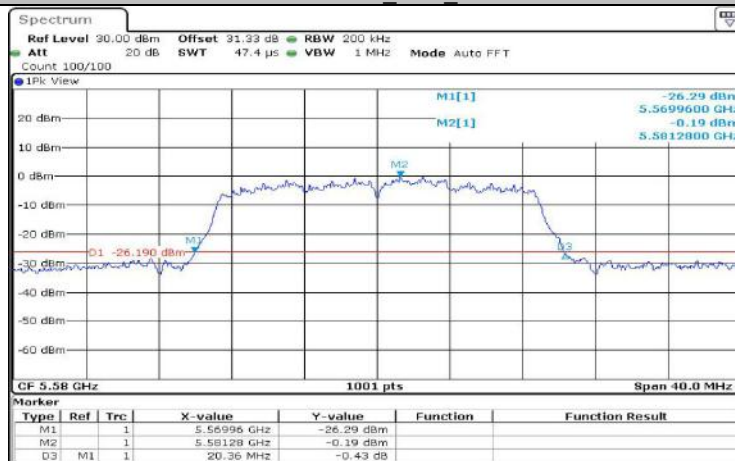
Date: 27.OCT.2022 07:41:14

11AC20SISO_Ant1_5500

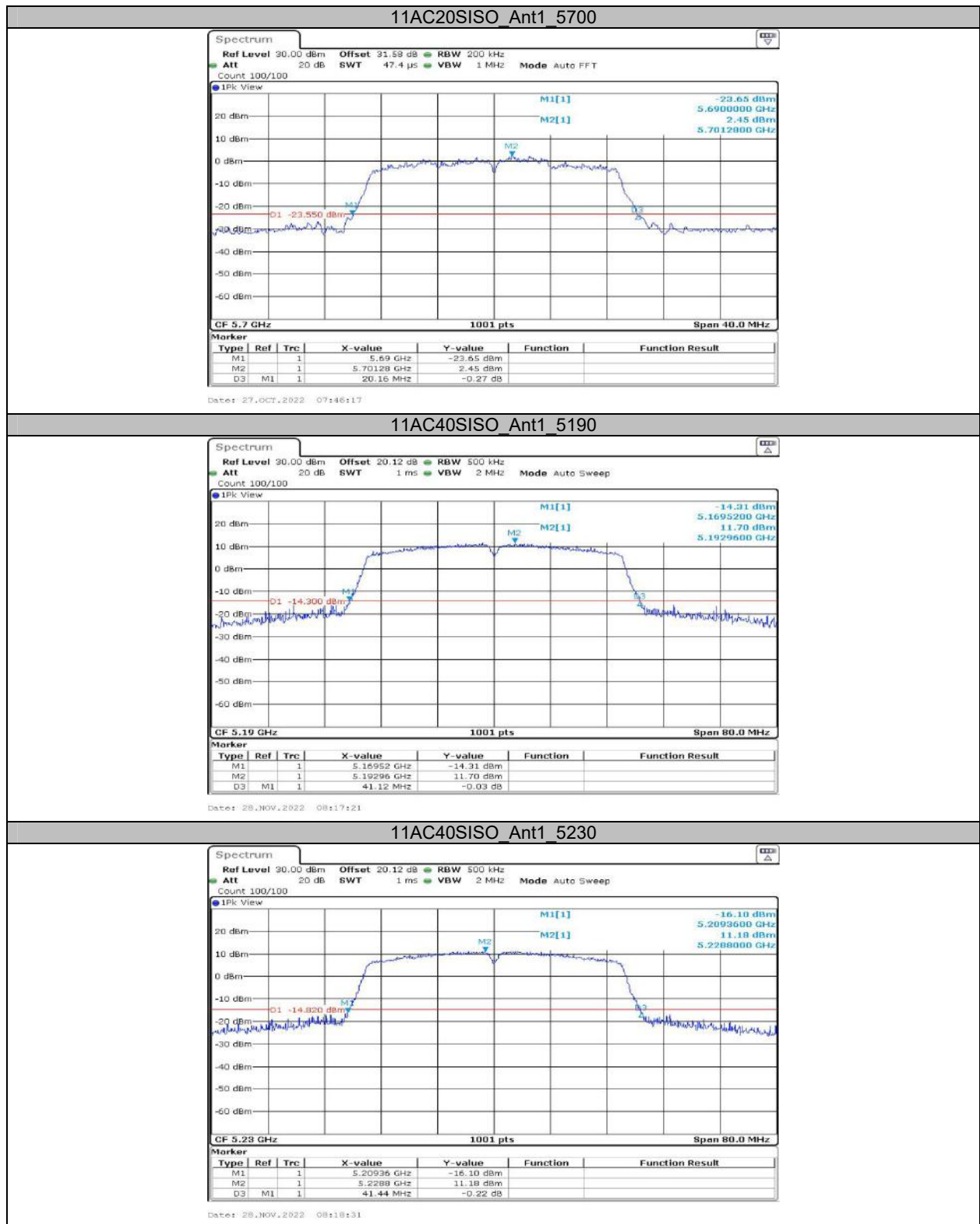


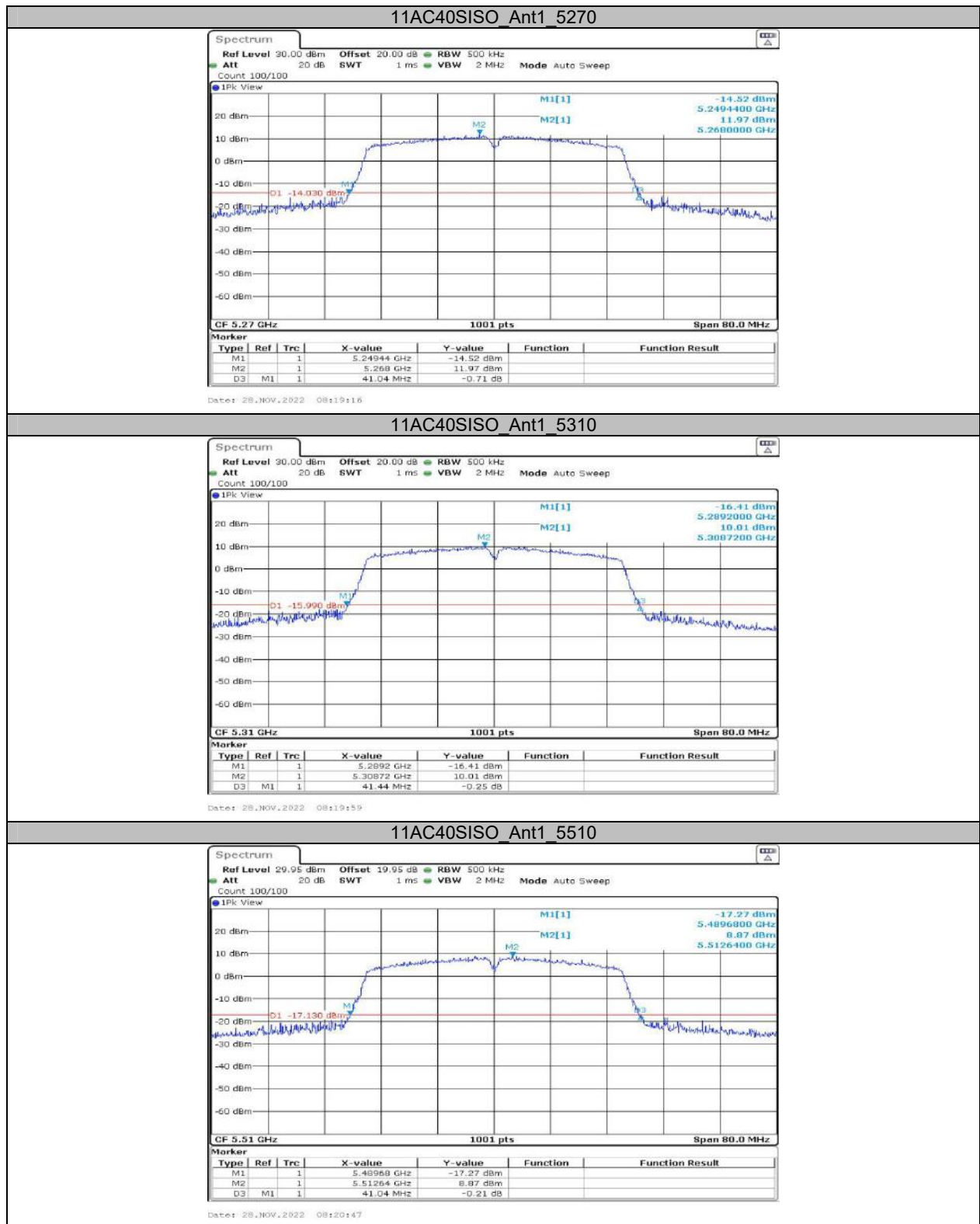
Date: 27.OCT.2022 07:43:01

11AC20SISO_Ant1_5580

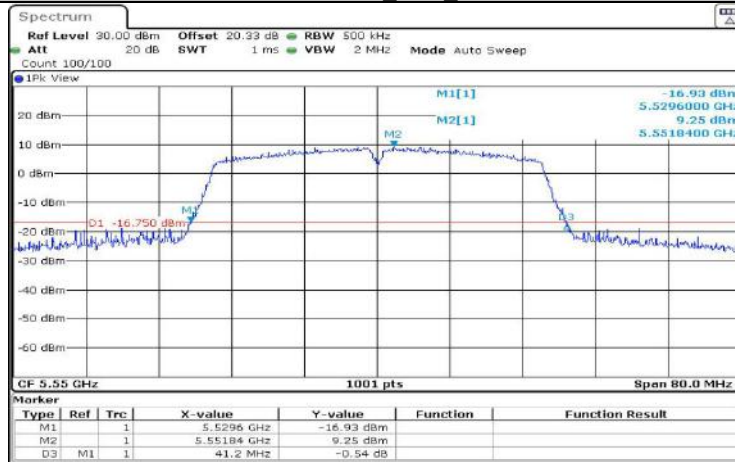


Date: 27.OCT.2022 07:44:51



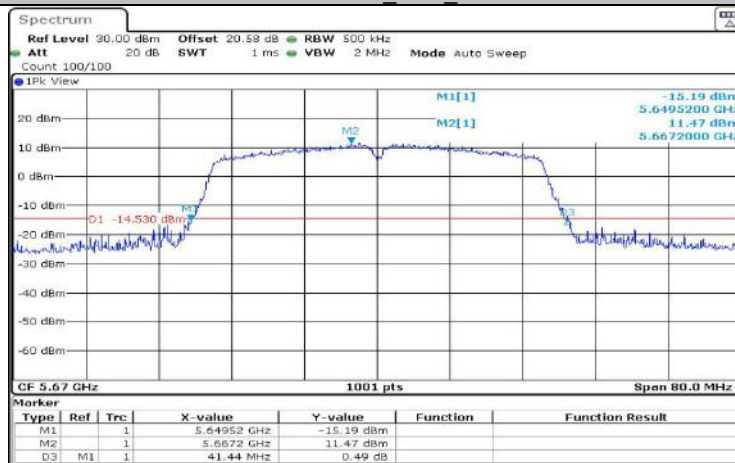


11AC40SISO_Ant1_5550



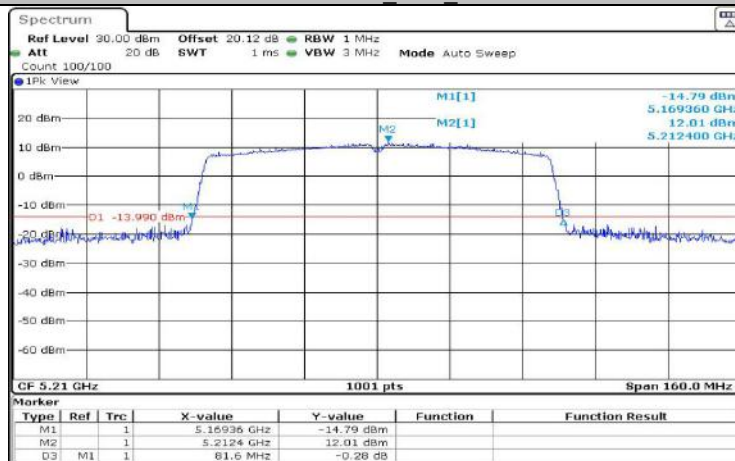
Date: 28.NOV.2022 08:21:49

11AC40SISO_Ant1_5670

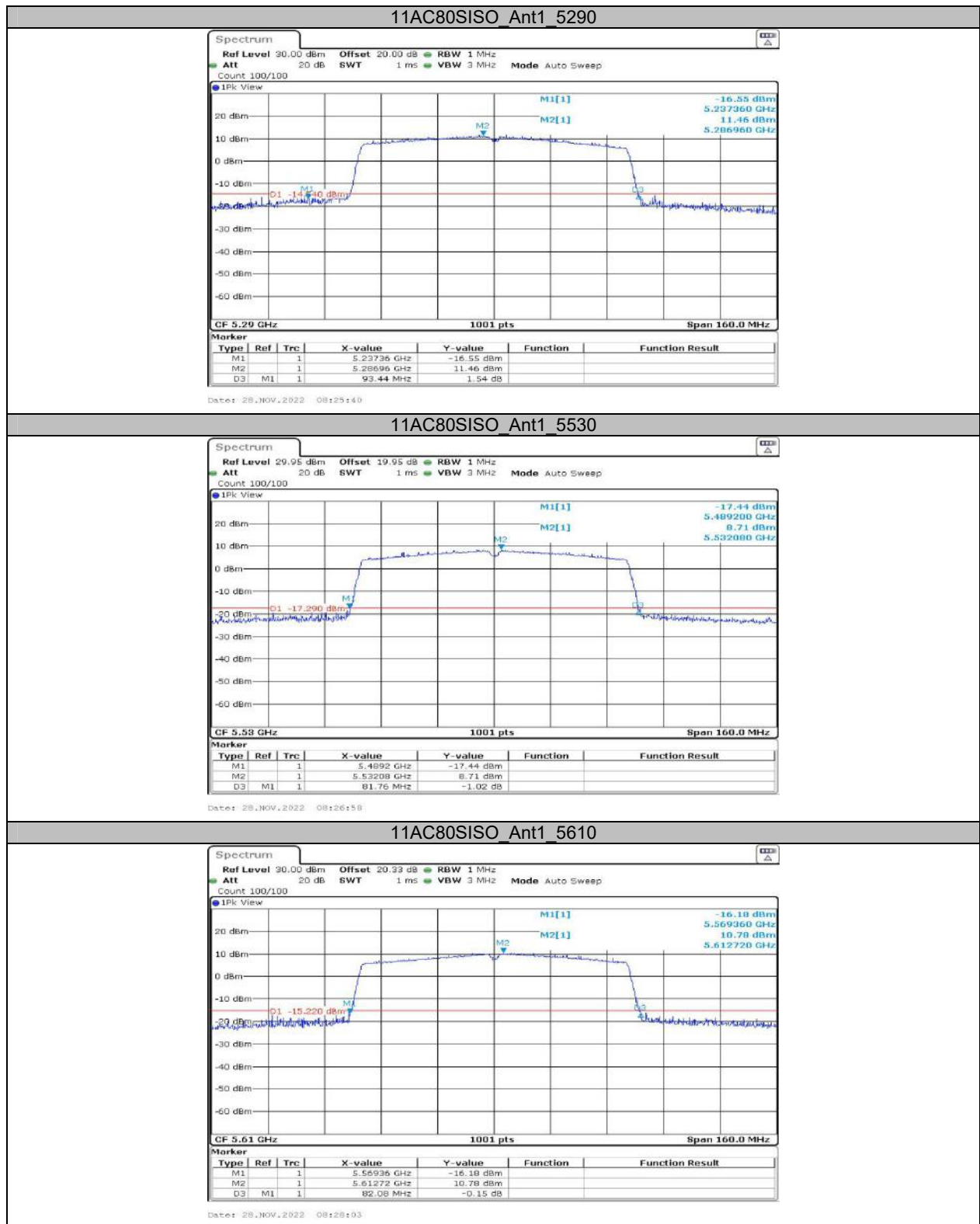


Date: 28.NOV.2022 08:22:33

11AC80SISO_Ant1_5210



Date: 28.NOV.2022 08:24:40



Appendix A2: Occupied channel bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.463	5171.289	5188.751	---	---
		5200	17.463	5191.369	5208.831	---	---
		5240	17.542	5231.249	5248.791	---	---
		5260	17.423	5251.329	5268.751	---	---
		5280	17.502	5271.249	5288.751	---	---
		5320	17.542	5311.169	5328.711	---	---
		5500	17.582	5491.249	5508.831	---	---
		5580	17.463	5571.329	5588.791	---	---
		5700	17.502	5691.289	5708.791	---	---
		5745	17.463	5736.329	5753.791	---	---
		5785	17.463	5776.289	5793.751	---	---
		5825	17.423	5816.329	5833.751	---	---
11N20SISO	Ant1	5180	18.501	5170.769	5189.271	---	---
		5200	18.462	5190.809	5209.271	---	---
		5240	18.462	5230.769	5249.231	---	---
		5260	18.382	5250.809	5269.191	---	---
		5280	18.462	5270.729	5289.191	---	---
		5320	18.501	5310.689	5329.191	---	---
		5500	18.581	5490.689	5509.271	---	---
		5580	18.501	5570.809	5589.311	---	---
		5700	18.581	5690.769	5709.351	---	---
		5745	18.541	5735.769	5754.311	---	---
		5785	18.462	5775.769	5794.231	---	---
		5825	18.382	5815.809	5834.191	---	---
11N40SISO	Ant1	5190	37.483	5171.459	5208.941	---	---
		5230	37.323	5211.459	5248.781	---	---
		5270	37.323	5251.299	5288.621	---	---
		5310	37.403	5291.219	5328.621	---	---
		5510	37.642	5491.219	5528.861	---	---
		5550	37.483	5531.379	5568.861	---	---
		5670	37.243	5651.618	5688.861	---	---
		5755	37.483	5736.459	5773.941	---	---
		5795	37.642	5776.219	5813.861	---	---
11AC20SISO	Ant1	5180	18.222	5170.929	5189.151	---	---
		5200	18.262	5190.969	5209.231	---	---
		5240	18.382	5230.849	5249.231	---	---
		5260	18.262	5250.929	5269.191	---	---
		5280	18.342	5270.849	5289.191	---	---
		5320	18.302	5310.849	5329.151	---	---
		5500	18.382	5490.849	5509.231	---	---
		5580	18.302	5570.929	5589.231	---	---

		5700	18.262	5690.929	5709.191	---	---
		5745	18.302	5735.889	5754.191	---	---
		5785	18.262	5775.889	5794.151	---	---
		5825	18.222	5815.929	5834.151	---	---
11AC40SISO	Ant1	5190	37.003	5171.618	5208.621	---	---
		5230	36.923	5211.618	5248.541	---	---
		5270	36.843	5251.618	5288.462	---	---
		5310	36.763	5291.618	5328.382	---	---
		5510	37.163	5491.459	5528.621	---	---
		5550	37.003	5531.618	5568.621	---	---
		5670	36.763	5651.858	5688.621	---	---
		5755	36.843	5736.778	5773.621	---	---
		5795	37.003	5776.538	5813.541	---	---
11AC80SISO	Ant1	5210	75.924	5172.278	5248.202	---	---
		5290	75.764	5251.958	5327.722	---	---
		5530	76.563	5491.798	5568.362	---	---
		5610	76.244	5572.118	5648.362	---	---
		5775	75.764	5737.278	5813.042	---	---

Note: For 5150-5250MHz and 5725-5850MHz Band, no transmitted signal in the 99% bandwidth extends into the U-NII-2A band and U-NII-2C band.

Test Graphs

