TESTREPORT

Applicant Name :	HONG KONG YO YOUNG INTELLIGENT CO., LIMITED
Address :	19H MAXGRAND PLAZA NO.3 TAI YAU STREET SAN PO KONG,KOWLOON,HONGKONG
Report Number :	RA230421-21182E-RF-00C
FCC ID:	2A8X4-AIR1ULTRAPRO

Test Standard (s)

FCC PART 15.407

Sample Description

Product Type:	Smart phone
Model No.:	Air1 Ultra Pro
Multiple Model(s) No.:	Raptor, Air2 Ultra, B1 Ultra
Trade Mark:	IIIF150
Date Received:	2023/04/21
Report Date:	2023/06/04

Test Result:	Pass*

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

Prepared and Checked By:

Roger Ling
EMC Engineer

Approved By:

Candy Li
EMC Engineer

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	RA230421-21182E-RF-00C	Original Report	2023-06-04

GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

Product	Smart phone
Tested model	Air1 Ultra Pro
Multiple Model(s)	Raptor, Air2 Ultra, B1 Ultra (model difference see product declaration letter of similarity)
Frequency Range	5G Wi-Fi: 5150~5350MHz ; 5470-5700MHz; 5725~5850 MHz
Mode	802.11a/n20/n40/ac20/ac40/ac80
Maximum Conducted Average Output Power	5150-5250 MHz: 12.12dBm 5250-5350 MHz: 11.85dBm 5470-5725 MHz: 11.32dBm 5725-5850 MHz: 13.10dBm
Modulation Technique	OFDM
Antenna Specification*	2.05dBi (provided by the applicant)
Voltage Range	DC 3.85V from battery
Test Sample serial number	24XH-1 for Conducted and Radiated Emissions Test 24XI-1 for RF Conducted Test (Assigned by ATC)
Sample/EUT Status	Good condition
Adapter information	Model: FC69U Input: AC 100-240V, 50/60Hz, 0.8 A Max Output: QC: DC 5V,3A/DC 9V, 3A/ DC 12V, 2.5A PD: DC 5V,3A/DC 9V, 3A/ DC 12V, 2.5A/ DC 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		0.71dB
Unwanted Emission, conducted		1.6dB
AC Power Lines Conducted Emissions		2.72dB
Emissions, Radiated	9kHz - 30MHz	2.06dB
	30MHz - 1GHz	5.08dB
	1GHz - 18GHz	4.96dB
	18GHz - 26.5GHz	5.16dB
	26.5GHz - 40GHz	4.64dB
Temperature		1℃
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 Floor 1, KuMaKe Building, Dongzhou Community, Guangming Street, Guangming District, Shenzhen, Guangdong, 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 429 7.01.

The lab has been recognized by Innovation, Science and Economic Development Canada to test to Canadian radio equipment requirements, the CAB identifier: CN0016. The Registration Number is 30241.

SYSTEM TEST CONFIGURATION

Description of Test Configuration

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

The device support 802.11a/n20/n40/ac20/ac40/ac80 mode, the n20/n40 mode was reduced test as identical parameter with ac20/ac40 mode.

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, 802.11n20/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, 122was 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, 802.11n20/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 testing 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
	802.11ac20	MCS0	16	16	16
	802.11ac40	MCS0	16	/	16
	802.11ac80	MCS0	/	14	/
5250 – 5350MHz	802.11a	6Mbps	16	16	16
	802.11ac20	MCS0	16	16	16
	802.11ac40	MCS0	16	/	16
	802.11ac80	MCS0	/	14	/
5470 – 5700MHz	802.11a	6Mbps	14	14	14
	802.11ac20	MCS0	14	14	14
	802.11ac40	MCS0	14	14	14
	802.11ac80	MCS0	13	/	13
5725 – 5850MHz	802.11a	6Mbps	16	16	16
	802.11ac20	MCS0	16	16	16
	802.11ac40	MCS0	16	/	16
	802.11ac80	MCS0	/	16	/

Note: the power level was provided by 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

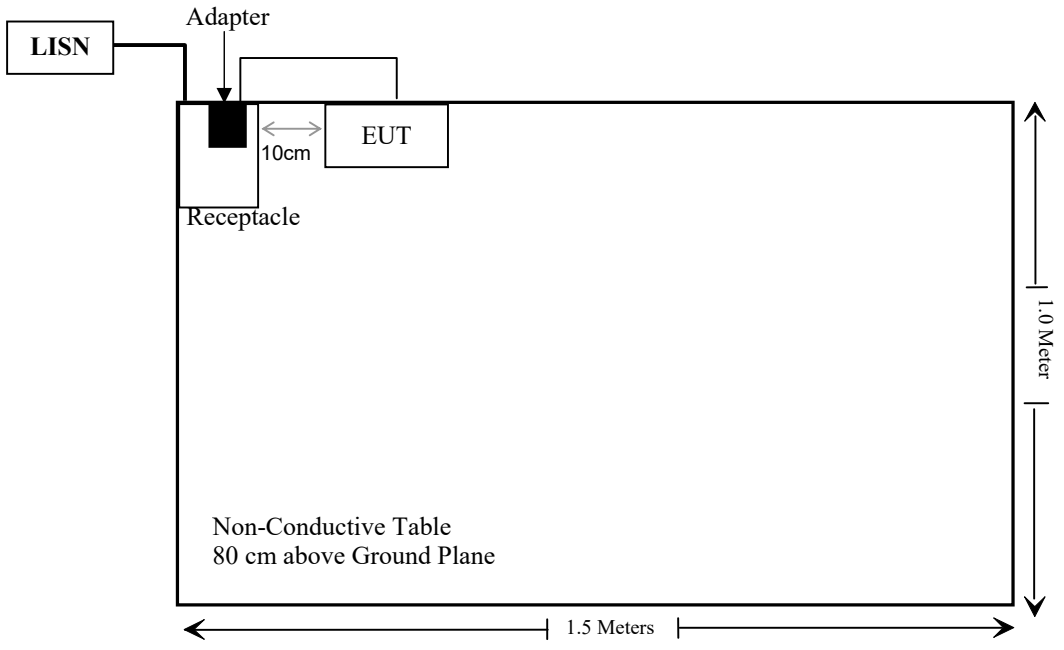
Manufacturer	Description	Model	Serial Number
/	/	/	/

External I/O Cable

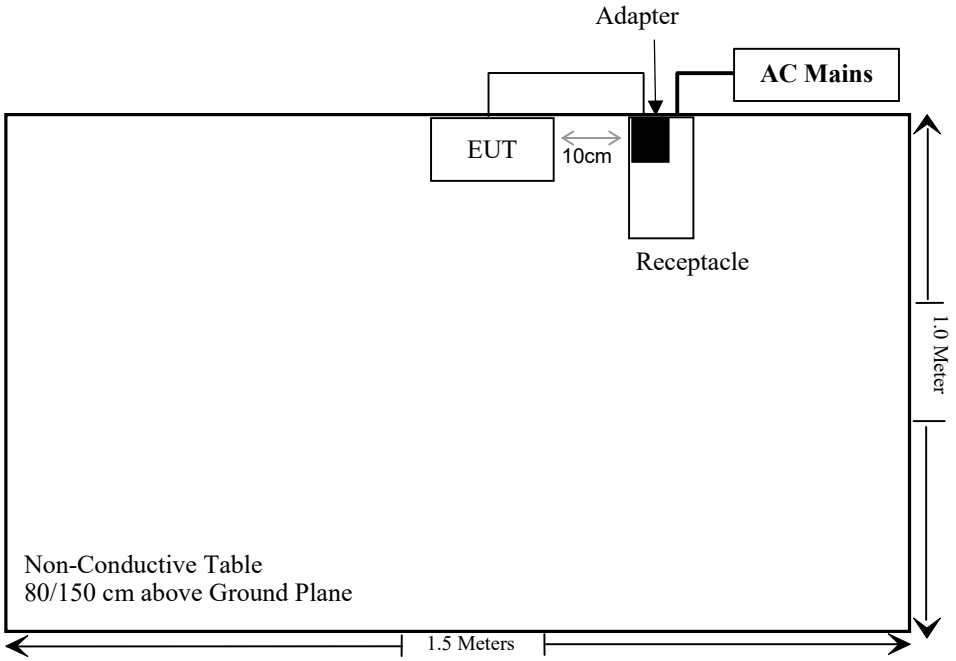
Cable Description	Length (m)	From Port	To
Un-shielding Detachable USB Cable	1.0	EUT	Adapter

Block Diagram of Test Setup

For Conducted Emissions



For Radiated Emissions:



Note: the support table edge was flush with the center of turntable

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: RA230421-21182E-RF-00F.

TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Conducted Emissions Test					
Rohde& Schwarz	EMI Test Receiver	ESCI	100784	2022/11/25	2023/11/24
Rohde & Schwarz	L.I.S.N.	ESH3-Z5	100305	2022/12/01	2023/11/30
Anritsu Corp	50 Coaxial Switch	MP59B	6100237248	2022/12/07	2023/12/06
Unknown	RF Coaxial Cable	No.17	N0350	2022/11/25	2023/11/24
Conducted Emission Test Software: e3 19821b (V9)					
Radiated Emissions Test					
Rohde& Schwarz	Test Receiver	ESR	102725	2022/11/25	2023/11/24
Rohde&Schwarz	Spectrum Analyzer	FSV40	101949	2022/11/25	2023/11/24
SONOMA INSTRUMENT	Amplifier	310 N	186131	2022/11/08	2023/11/07
A.H. Systems, inc.	Preamplifier	PAM-0118P	135	2022/11/08	2023/11/07
Quinstar	Amplifier	QLW-18405536-J0	15964001002	2022/11/08	2023/11/07
Schwarzbeck	Bilog Antenna	VULB9163	9163-323	2021/07/06	2024/07/05
Schwarzbeck	Horn Antenna	BBHA9120D	837	2023/02/22	2026/02/21
Schwarzbeck	HORN ANTENNA	BBHA9170	9170-359	2022/12/26	2025/12/25
Radiated Emission Test Software: e3 19821b (V9)					
Unknown	RF Coaxial Cable	No.10	N050	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.11	N1000	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.12	N040	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.13	N300	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.14	N800	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.15	N600	2022/11/25	2023/11/24
Unknown	RF Coaxial Cable	No.16	N650	2022/11/25	2023/11/24
CD	Band Reject Filter	BRM-5.15/5.35g-45	075	2022/11/25	2023/11/24
CD	Band Reject Filter	BRM-5.47/5.725G-45	055	2022/11/25	2023/11/24
CD	Band Reject Filter	BRM-5.725/5.875G-45	065	2022/11/25	2023/11/24

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
RF Conducted Test					
Rohde&Schwarz	Spectrum Analyzer	FSV-40	101590	2022/11/25	2023/11/24
Tonscend	RF Control Unit	JS0806-2	19G8060182	2022/10/24	2023/10/23
Agilent	Power Sensor	U2021XA	MY5425003	2023/02/25	2024/02/24
HP	20dB Attenuator	8491A	53857	2022/11/25	2023/11/24

*** 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§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: RA230421-21182E-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.
c. 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 2.05dBi, fulfill the requirement of this section. Please refer to the EUT photos.

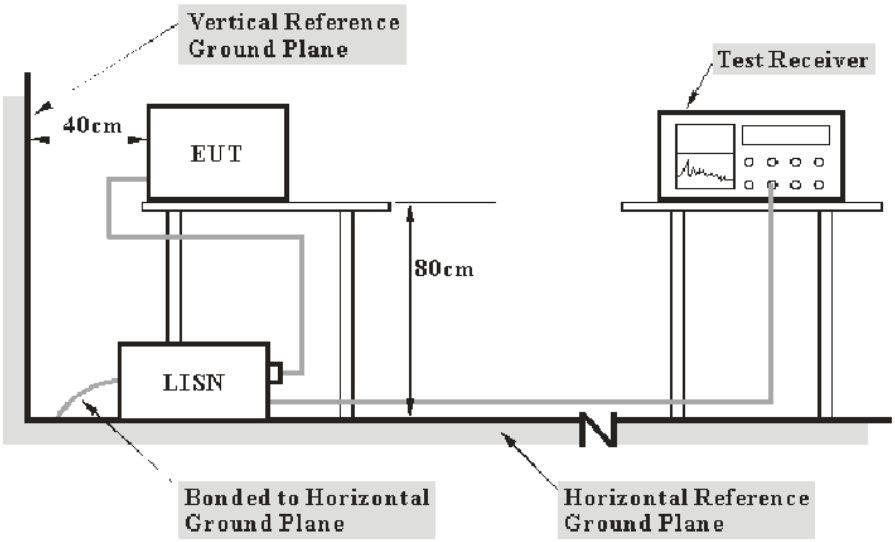
Result: Compliant.

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.

Factor & Over limit Calculation

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

Factor = LISN VDF + 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:

Over Limit = Level – Limit
Level = Read Level + Factor

Test Data

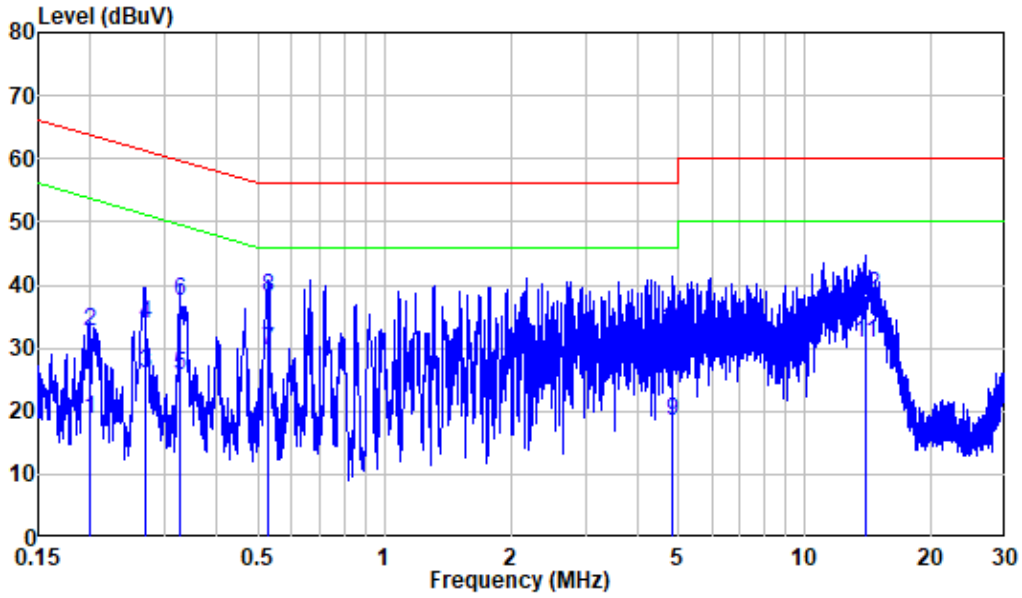
Environmental Conditions

Temperature:	23 °C
Relative Humidity:	49 %
ATM Pressure:	101.0 kPa

The testing was performed by Jerry Wu on 2023-05-05.

EUT operation mode: Transmitting (worst case is 802.11ac40, 5670MHz)

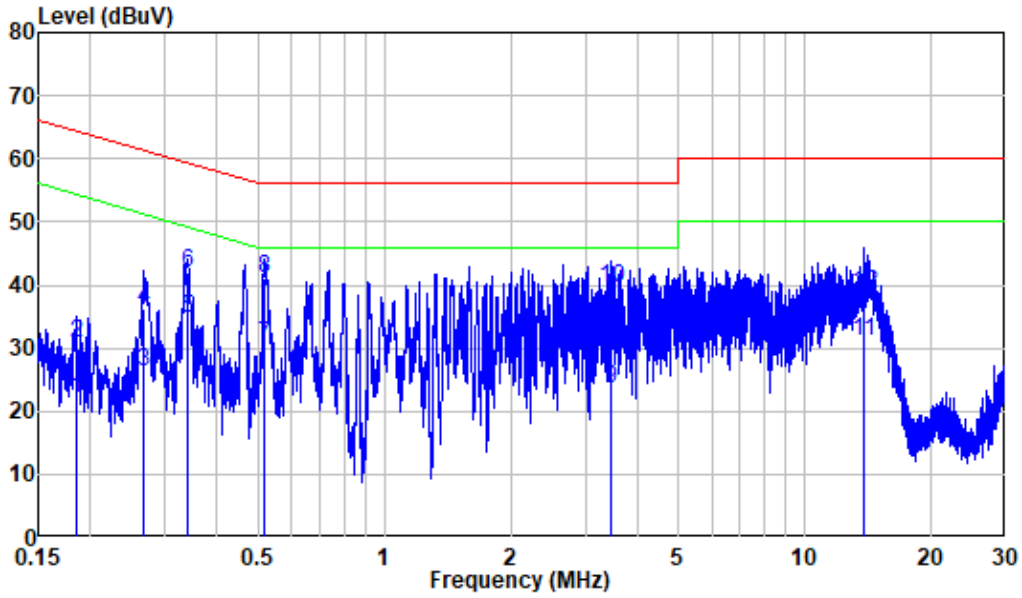
AC 120V/60 Hz, Line:



Site : Shielding Room
Condition: Line
Job No. : RA230421-21182E-RF
Mode : Charging+5G WIFI Transmitting
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.198	10.29	8.44	18.73	53.68	-34.95	Average
2	0.198	10.29	22.40	32.69	63.68	-30.99	QP
3	0.269	10.37	15.50	25.87	51.16	-25.29	Average
4	0.269	10.37	23.33	33.70	61.16	-27.46	QP
5	0.327	10.43	15.31	25.74	49.53	-23.79	Average
6	0.327	10.43	26.89	37.32	59.53	-22.21	QP
7	0.529	10.59	18.94	29.53	46.00	-16.47	Average
8	0.529	10.59	27.36	37.95	56.00	-18.05	QP
9	4.842	10.55	7.79	18.34	46.00	-27.66	Average
10	4.842	10.55	22.34	32.89	56.00	-23.11	QP
11	13.961	10.26	20.53	30.79	50.00	-19.21	Average
12	13.961	10.26	28.17	38.43	60.00	-21.57	QP

AC 120V/60 Hz, Neutral:



Site : Shielding Room
Condition: Neutral
Job No. : RA230421-21182E-RF
Mode : Charging+5G WIFI Transmitting
Power : AC 120V 60Hz

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dBuV	dBuV	dBuV	dB	
1	0.185	10.28	11.70	21.98	54.24	-32.26	Average
2	0.185	10.28	20.40	30.68	64.24	-33.56	QP
3	0.268	10.34	15.83	26.17	51.18	-25.01	Average
4	0.268	10.34	26.02	36.36	61.18	-24.82	QP
5	0.340	10.39	24.43	34.82	49.21	-14.39	Average
6	0.340	10.39	31.57	41.96	59.21	-17.25	QP
7	0.516	10.47	19.94	30.41	46.00	-15.59	Average
8	0.516	10.47	30.55	41.02	56.00	-14.98	QP
9	3.452	10.53	12.95	23.48	46.00	-22.52	Average
10	3.452	10.53	29.00	39.53	56.00	-16.47	QP
11	13.759	10.30	20.92	31.22	50.00	-18.78	Average
12	13.759	10.30	28.22	38.52	60.00	-21.48	QP

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

Applicable Standard

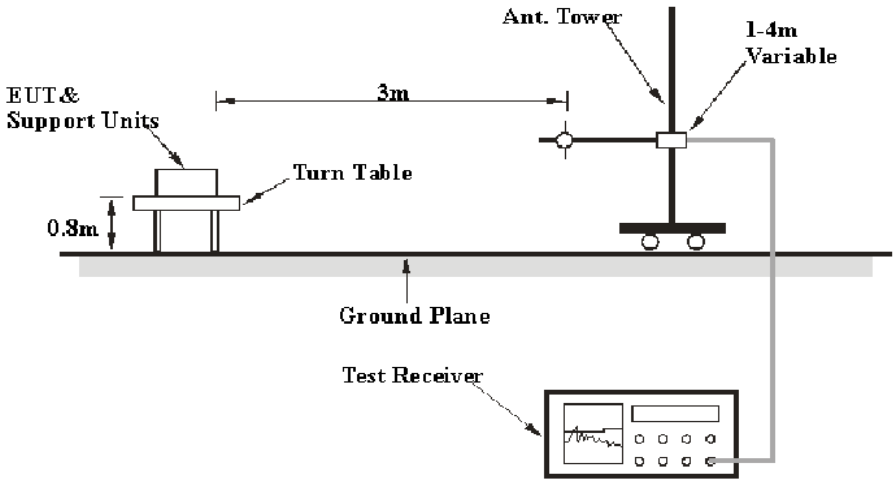
FCC §15.407 (b); §15.209; §15.205;

(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.

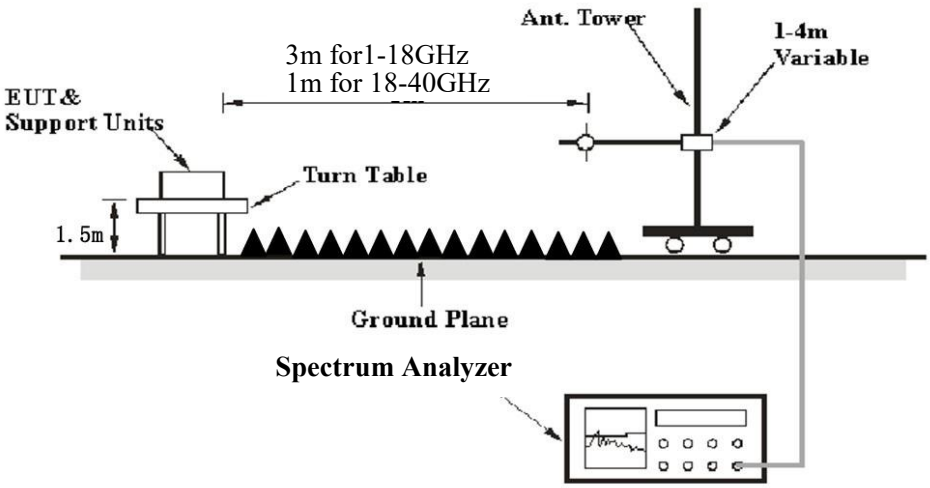
Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209.

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;

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

where

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

So the extrapolation factor of 1m is 20*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 & Over Limit/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:

Factor = Antenna Factor + Cable Loss - 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:

Over Limit/Margin = Level / Corrected Amplitude – Limit
Level / Corrected Amplitude = Read Level + Factor

Test Data

Environmental Conditions

Temperature:	24~26 ℃
Relative Humidity:	56~58 %
ATM Pressure:	101.0 kPa

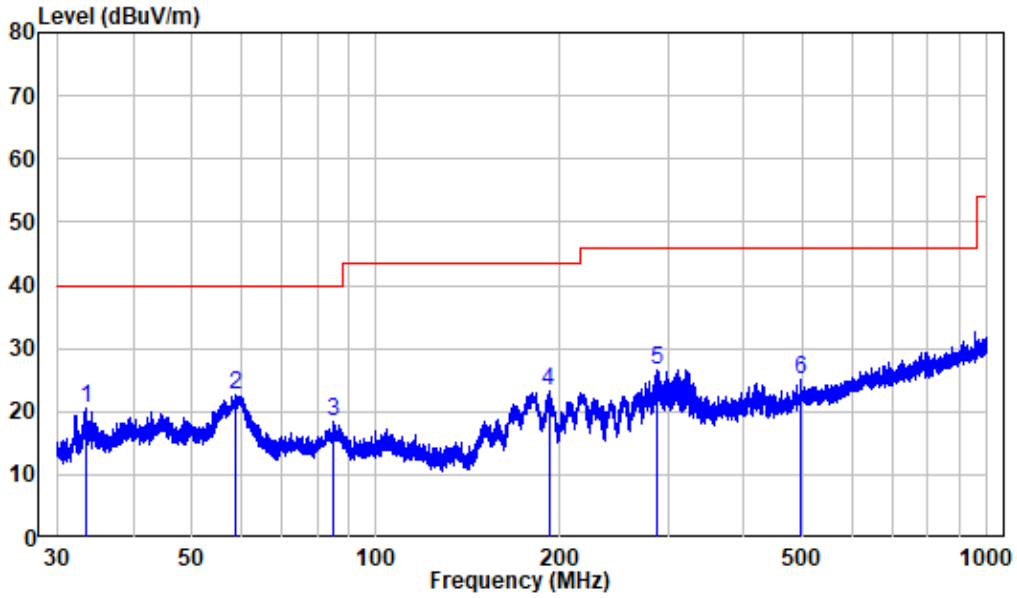
The testing was performed by Jimi Zheng on 2023-05-06 for below 1GHz and on 2023-05-10 for above 1GHz.

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 802.11ac40, 5670MHz)*

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

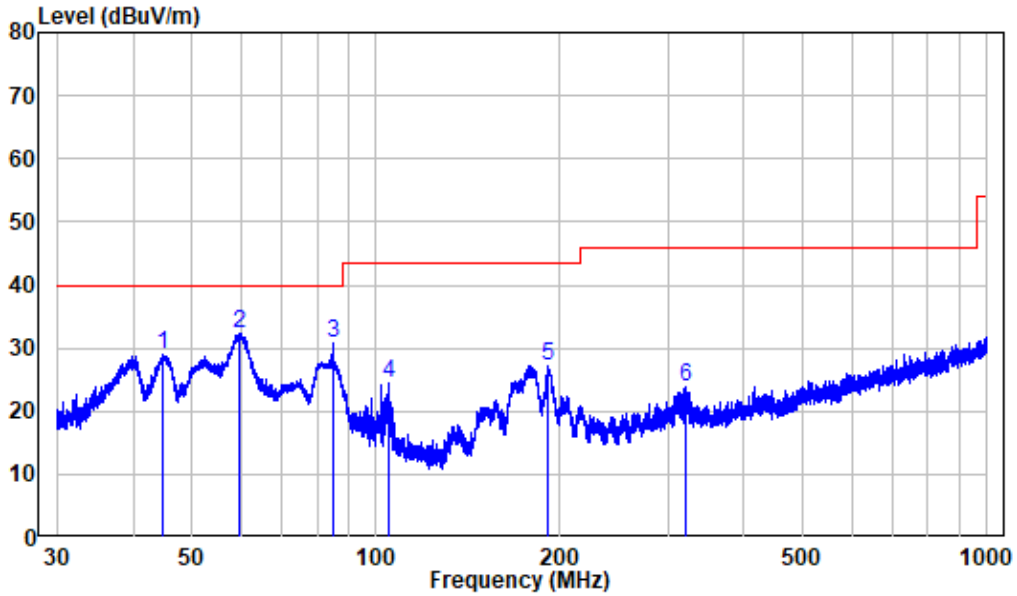
Horizontal



Site : chamber
Condition: 3m HORIZONTAL
Job No. : RA230421-21182E-RF
Test Mode: 5G WIFI

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	33.445	-11.94	32.61	20.67	40.00	-19.33	Peak
2	58.870	-10.22	32.87	22.65	40.00	-17.35	Peak
3	84.925	-15.66	34.18	18.52	40.00	-21.48	Peak
4	191.661	-11.30	34.58	23.28	43.50	-20.22	Peak
5	288.117	-9.36	35.93	26.57	46.00	-19.43	Peak
6	496.805	-4.38	29.58	25.20	46.00	-20.80	Peak

Vertical



Site : chamber
Condition: 3m VERTICAL
Job No. : RA230421-21182E-RF
Test Mode: 5G WIFI

	Freq	Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB/m	dBuV	dBuV/m	dBuV/m	dB	
1	44.763	-9.93	38.86	28.93	40.00	-11.07	Peak
2	59.702	-10.51	42.95	32.44	40.00	-7.56	Peak
3	84.888	-15.67	46.33	30.66	40.00	-9.34	Peak
4	104.765	-11.81	36.36	24.55	43.50	-18.95	Peak
5	191.409	-11.35	38.44	27.09	43.50	-16.41	Peak
6	320.218	-8.44	32.25	23.81	46.00	-22.19	Peak

Above 1GHz:

5150-5250 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5180MHz									
4500	66.78	PK	241	1.2	H	-6.44	60.34	74	-13.66
4500	53.50	AV	241	1.2	H	-6.44	47.06	54	-6.94
4500	66.81	PK	318	1	V	-6.44	60.37	74	-13.63
4500	53.68	AV	318	1	V	-6.44	47.24	54	-6.76
5150	67.38	PK	34	1.5	H	-4.91	62.47	74	-11.53
5150	54.80	AV	34	1.5	H	-4.91	49.89	54	-4.11
5150	66.82	PK	69	1.8	V	-4.91	61.91	74	-12.09
5150	54.86	AV	69	1.8	V	-4.91	49.95	54	-4.05
10360	54.19	PK	138	2.4	H	5.36	59.55	68.2	-8.65
10360	53.94	PK	51	2.4	V	5.36	59.30	68.2	-8.90
5200MHz									
10400	53.72	PK	289	1.5	H	5.66	59.38	68.2	-8.82
10400	53.91	PK	250	1.5	V	5.66	59.57	68.2	-8.63
5240MHz									
5350	64.03	PK	46	2.3	H	-3.89	60.14	74	-13.86
5350	50.35	AV	46	2.3	H	-3.89	46.46	54	-7.54
5350	63.33	PK	303	1.2	V	-3.89	59.44	74	-14.56
5350	50.43	AV	303	1.2	V	-3.89	46.54	54	-7.46
5460	62.14	PK	181	1.5	H	-3.24	58.90	74	-15.10
5460	48.53	AV	181	1.5	H	-3.24	45.29	54	-8.71
5460	62.27	PK	136	2.2	V	-3.24	59.03	74	-14.97
5460	48.62	AV	136	2.2	V	-3.24	45.38	54	-8.62
10480	54.63	PK	145	1.1	H	5.52	60.15	68.2	-8.05
10480	54.16	PK	118	1.1	V	5.52	59.68	68.2	-8.52

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5180MHz									
4500	66.68	PK	60	2	H	-6.44	60.24	74	-13.76
4500	53.66	AV	60	2	H	-6.44	47.22	54	-6.78
4500	66.20	PK	261	2.3	V	-6.44	59.76	74	-14.24
4500	53.43	AV	261	2.3	V	-6.44	46.99	54	-7.01
5150	66.87	PK	295	1.8	H	-4.91	61.96	74	-12.04
5150	54.81	AV	295	1.8	H	-4.91	49.90	54	-4.10
5150	66.99	PK	334	1.6	V	-4.91	62.08	74	-11.92
5150	54.69	AV	334	1.6	V	-4.91	49.78	54	-4.22
10360	54.54	PK	172	1.4	H	5.36	59.90	68.2	-8.30
10360	54.51	PK	166	1.4	V	5.36	59.87	68.2	-8.33
5200MHz									
10400	54.34	PK	152	2.1	H	5.66	60	68.2	-8.20
10400	54.12	PK	164	2.1	V	5.66	59.78	68.2	-8.42
5240MHz									
5350	63.98	PK	33	1.9	H	-3.89	60.09	74	-13.91
5350	50.27	AV	33	1.9	H	-3.89	46.38	54	-7.62
5350	63.28	PK	311	1.6	V	-3.89	59.39	74	-14.61
5350	50.74	AV	311	1.6	V	-3.89	46.85	54	-7.15
5460	62.36	PK	245	1.9	H	-3.24	59.12	74	-14.88
5460	48.83	AV	245	1.9	H	-3.24	45.59	54	-8.41
5460	62.47	PK	273	2.1	V	-3.24	59.23	74	-14.77
5460	48.82	AV	273	2.1	V	-3.24	45.58	54	-8.42
10480	54.04	PK	271	1.5	H	5.52	59.56	68.2	-8.64
10480	54.12	PK	100	1.5	V	5.52	59.64	68.2	-8.56

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5190MHz									
4500	66.80	PK	23	1.5	H	-6.44	60.36	74	-13.64
4500	54.08	AV	23	1.5	H	-6.44	47.64	54	-6.36
4500	67.00	PK	284	1.4	V	-6.44	60.56	74	-13.44
4500	53.82	AV	284	1.4	V	-6.44	47.38	54	-6.62
5150	68.15	PK	51	1.5	H	-4.91	63.24	74	-10.76
5150	55.00	AV	51	1.5	H	-4.91	50.09	54	-3.91
5150	67.38	PK	55	1.7	V	-4.91	62.47	74	-11.53
5150	55.09	AV	55	1.7	V	-4.91	50.18	54	-3.82
10380	54.51	PK	182	1.3	H	5.51	60.02	68.2	-8.18
10380	55.14	PK	108	1.3	V	5.51	60.65	68.2	-7.55
5230MHz									
5350	63.15	PK	128	1.7	H	-3.89	59.26	74	-14.74
5350	50.54	AV	128	1.7	H	-3.89	46.65	54	-7.35
5350	63.17	PK	221	1.9	V	-3.89	59.28	74	-14.72
5350	50.60	AV	221	1.9	V	-3.89	46.71	54	-7.29
5460	62.23	PK	203	1.3	H	-3.24	58.99	74	-15.01
5460	48.82	AV	203	1.3	H	-3.24	45.58	54	-8.42
5460	62.77	PK	60	1.1	V	-3.24	59.53	74	-14.47
5460	48.90	AV	60	1.1	V	-3.24	45.66	54	-8.34
10460	54.04	PK	203	2.2	H	5.51	59.55	68.2	-8.65
10460	54.38	PK	334	2.2	V	5.51	59.89	68.2	-8.31

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5210MHz									
4500	66.43	PK	237	1.1	H	-6.44	59.99	74	-14.01
4500	54.76	AV	237	1.1	H	-6.44	48.32	54	-5.68
4500	66.30	PK	252	2	V	-6.44	59.86	74	-14.14
4500	54.64	AV	252	2	V	-6.44	48.20	54	-5.80
5150	69.80	PK	17	1.4	H	-4.91	64.89	74	-9.11
5150	55.87	AV	17	1.4	H	-4.91	50.96	54	-3.04
5150	69.63	PK	166	2.3	V	-4.91	64.72	74	-9.28
5150	55.74	AV	166	2.3	V	-4.91	50.83	54	-3.17
5350	64.07	PK	119	1.8	H	-3.89	60.18	74	-13.82
5350	51.85	AV	119	1.8	H	-3.89	47.96	54	-6.04
5350	63.12	PK	275	2.4	V	-3.89	59.23	74	-14.77
5350	51.05	AV	275	2.4	V	-3.89	47.16	54	-6.84
5460	62.09	PK	271	1.3	H	-3.24	58.85	74	-15.15
5460	49.95	AV	271	1.3	H	-3.24	46.71	54	-7.29
5460	61.61	PK	187	2.3	V	-3.24	58.37	74	-15.63
5460	49.39	AV	187	2.3	V	-3.24	46.15	54	-7.85
10420	53.43	PK	329	1.5	H	5.60	59.03	68.2	-9.17
10420	53.91	PK	319	1.5	V	5.60	59.51	68.2	-8.69

5250-5350 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5260MHz									
4500	66.19	PK	121	2.4	H	-6.44	59.75	74	-14.25
4500	53.11	AV	121	2.4	H	-6.44	46.67	54	-7.33
4500	66.10	PK	171	2.1	V	-6.44	59.66	74	-14.34
4500	53.20	AV	171	2.1	V	-6.44	46.76	54	-7.24
5150	66.02	PK	333	2.2	H	-4.91	61.11	74	-12.89
5150	54.32	AV	333	2.2	H	-4.91	49.41	54	-4.59
5150	66.54	PK	259	1.8	V	-4.91	61.63	74	-12.37
5150	54.25	AV	259	1.8	V	-4.91	49.34	54	-4.66
10520	54.98	PK	125	2.2	H	5.45	60.43	68.2	-7.77
10520	54.38	PK	99	2.2	V	5.45	59.83	68.2	-8.37
5280MHz									
10560	55.43	PK	70	1.5	H	5.43	60.86	68.2	-7.34
10560	55.28	PK	331	1.5	V	5.43	60.71	68.2	-7.49
5320MHz									
5350	63.63	PK	100	1.1	H	-3.89	59.74	74	-14.26
5350	50.29	AV	100	1.1	H	-3.89	46.40	54	-7.60
5350	63.58	PK	174	1	V	-3.89	59.69	74	-14.31
5350	50.40	AV	174	1	V	-3.89	46.51	54	-7.49
5460	61.61	PK	122	2.2	H	-3.24	58.37	74	-15.63
5460	48.16	AV	122	2.2	H	-3.24	44.92	54	-9.08
5460	61.93	PK	318	1.5	V	-3.24	58.69	74	-15.31
5460	48.84	AV	318	1.5	V	-3.24	45.60	54	-8.40
10640	54.97	PK	269	2.4	H	5.38	60.35	74	-13.65
10640	41.70	AV	6	2.4	H	5.38	47.08	54	-6.92
10640	54.84	PK	221	2.1	V	5.38	60.22	74	-13.78
10640	41.64	AV	123	2.1	V	5.38	47.02	54	-6.98

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5260MHz									
4500	66.17	PK	146	2	H	-6.44	59.73	74	-14.27
4500	53.07	AV	146	2	H	-6.44	46.63	54	-7.37
4500	65.86	PK	34	2	V	-6.44	59.42	74	-14.58
4500	53.53	AV	34	2	V	-6.44	47.09	54	-6.91
5150	66.30	PK	203	2.2	H	-4.91	61.39	74	-12.61
5150	54.20	AV	203	2.2	H	-4.91	49.29	54	-4.71
5150	66.82	PK	141	1.7	V	-4.91	61.91	74	-12.09
5150	54.45	AV	141	1.7	V	-4.91	49.54	54	-4.46
10520	54.73	PK	296	1.6	H	5.45	60.18	68.2	-8.02
10520	54.49	PK	54	1.6	V	5.45	59.94	68.2	-8.26
5280MHz									
10560	55.61	PK	5	1.1	H	5.43	61.04	68.2	-7.16
10560	55.44	PK	25	1.1	V	5.43	60.87	68.2	-7.33
5320MHz									
5350	65.74	PK	115	2.5	H	-3.89	61.85	74	-12.15
5350	50.52	AV	115	2.5	H	-3.89	46.63	54	-7.37
5350	65.87	PK	312	1.8	V	-3.89	61.98	74	-12.02
5350	50.61	AV	312	1.8	V	-3.89	46.72	54	-7.28
5460	61.63	PK	211	2.5	H	-3.24	58.39	74	-15.61
5460	48.36	AV	211	2.5	H	-3.24	45.12	54	-8.88
5460	62.12	PK	174	2	V	-3.24	58.88	74	-15.12
5460	48.47	AV	174	2	V	-3.24	45.23	54	-8.77
10640	55.93	PK	8	2	H	5.38	61.31	74	-12.69
10640	41.74	AV	295	2	H	5.38	47.12	54	-6.88
10640	55.88	PK	93	2.2	V	5.38	61.26	74	-12.74
10640	41.86	AV	344	2.2	V	5.38	47.24	54	-6.76

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5270MHz									
4500	68.24	PK	113	1.7	H	-6.44	61.80	74	-12.20
4500	54.20	AV	113	1.7	H	-6.44	47.76	54	-6.24
4500	66.53	PK	343	1.3	V	-6.44	60.09	74	-13.91
4500	54.10	AV	343	1.3	V	-6.44	47.66	54	-6.34
5150	69.15	PK	302	2	H	-4.91	64.24	74	-9.76
5150	54.85	AV	302	2	H	-4.91	49.94	54	-4.06
5150	69.17	PK	337	1.7	V	-4.91	64.26	74	-9.74
5150	54.78	AV	337	1.7	V	-4.91	49.87	54	-4.13
10540	54.75	PK	355	2.3	H	5.43	60.18	68.2	-8.02
10540	54.71	PK	77	2.3	V	5.43	60.14	68.2	-8.06
5310MHz									
5350	73.05	PK	274	1.7	H	-3.89	69.16	74	-4.84
5350	54.16	AV	274	1.7	H	-3.89	50.27	54	-3.73
5350	69.78	PK	0	1.6	V	-3.89	65.89	74	-8.11
5350	52.08	AV	0	1.6	V	-3.89	48.19	54	-5.81
5460	62.21	PK	23	1.5	H	-3.24	58.97	74	-15.03
5460	48.81	AV	23	1.5	H	-3.24	45.57	54	-8.43
5460	62.37	PK	25	2.2	V	-3.24	59.13	74	-14.87
5460	49.02	AV	25	2.2	V	-3.24	45.78	54	-8.22
10620	55.21	PK	65	2.2	H	5.63	60.84	74	-13.16
10620	41.31	AV	264	2.2	H	5.63	46.94	54	-7.06
10620	55.13	PK	349	1.4	V	5.63	60.76	74	-13.24
10620	41.17	AV	3	1.4	V	5.63	46.80	54	-7.20

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5290MHz									
4500	66.74	PK	66	1.9	H	-6.44	60.30	74	-13.70
4500	54.56	AV	66	1.9	H	-6.44	48.12	54	-5.88
4500	67.19	PK	168	1.8	V	-6.44	60.75	74	-13.25
4500	54.73	AV	168	1.8	V	-6.44	48.29	54	-5.71
5150	67.18	PK	204	1.3	H	-4.91	62.27	74	-11.73
5150	55.73	AV	204	1.3	H	-4.91	50.82	54	-3.18
5150	66.91	PK	169	1.3	V	-4.91	62.00	74	-12.00
5150	55.76	AV	169	1.3	V	-4.91	50.85	54	-3.15
5350	72.27	PK	192	1.5	H	-3.89	68.38	74	-5.62
5350	54.89	AV	192	1.5	H	-3.89	51.00	54	-3.00
5350	71.94	PK	130	2.4	V	-3.89	68.05	74	-5.95
5350	54.65	AV	130	2.4	V	-3.89	50.76	54	-3.24
5460	62.60	PK	36	1.8	H	-3.24	59.36	74	-14.64
5460	50.69	AV	36	1.8	H	-3.24	47.45	54	-6.55
5460	62.47	PK	143	2.5	V	-3.24	59.23	74	-14.77
5460	50.55	AV	143	2.5	V	-3.24	47.31	54	-6.69
10580	55.96	PK	334	1.5	H	5.66	61.62	68.2	-6.58
10580	54.91	PK	278	1.5	V	5.66	60.57	68.2	-7.63

5470-5725MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5500MHz									
5460	62.68	PK	252	2.3	H	-3.24	59.44	74	-14.56
5460	49.25	AV	252	2.3	H	-3.24	46.01	54	-7.99
5460	61.77	PK	71	1.8	V	-3.24	58.53	74	-15.47
5460	48.76	AV	71	1.8	V	-3.24	45.52	54	-8.48
5470	63.09	PK	330	2.4	H	-3.20	59.89	68.2	-8.31
5470	62.46	PK	337	1.7	V	-3.20	59.26	68.2	-8.94
11000	53.41	PK	112	1.3	H	6.60	60.01	74	-13.99
11000	39.77	AV	248	1.3	H	6.60	46.37	54	-7.63
11000	52.88	PK	175	2.1	V	6.60	59.48	74	-14.52
11000	39.59	AV	162	2.1	V	6.60	46.19	54	-7.81
5580MHz									
11160	54.12	PK	50	1.4	H	6.40	60.52	74	-13.48
11160	39.99	AV	163	1.4	H	6.40	46.39	54	-7.61
11160	53.51	PK	174	1.1	V	6.40	59.91	74	-14.09
11160	39.84	AV	30	1.1	V	6.40	46.24	54	-7.76
5700MHz									
5725	67.14	PK	277	1.3	H	-2.73	64.41	68.2	-3.79
5725	66.43	PK	160	2	V	-2.73	63.70	68.2	-4.50
5745	67.14	PK	102	2.2	H	-3.07	64.07	68.2	-4.13
5745	66.11	PK	100	2.3	V	-3.07	63.04	68.2	-5.16
11400	54.07	PK	260	1.7	H	6.91	60.98	74	-13.02
11400	39.88	AV	159	1.7	H	6.91	46.79	54	-7.21
11400	53.50	PK	19	2	V	6.91	60.41	74	-13.59
11400	39.56	AV	51	2	V	6.91	46.47	54	-7.53

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5500MHz									
5460	62.56	PK	171	1.1	H	-3.24	59.32	74	-14.68
5460	49.15	AV	171	1.1	H	-3.24	45.91	54	-8.09
5460	61.98	PK	45	1.5	V	-3.24	58.74	74	-15.26
5460	48.67	AV	45	1.5	V	-3.24	45.43	54	-8.57
5470	63.16	PK	107	1.5	H	-3.20	59.96	68.2	-8.24
5470	62.65	PK	122	1.8	V	-3.20	59.45	68.2	-8.75
11000	53.08	PK	36	1.9	H	6.60	59.68	74	-14.32
11000	39.43	AV	327	1.9	H	6.60	46.03	54	-7.97
11000	52.72	PK	25	1.9	V	6.60	59.32	74	-14.68
11000	38.99	AV	95	1.9	V	6.60	45.59	54	-8.41
5580MHz									
11160	54.11	PK	40	1.1	H	6.40	60.51	74	-13.49
11160	40.34	AV	327	1.1	H	6.40	46.74	54	-7.26
11160	53.58	PK	50	2.4	V	6.40	59.98	74	-14.02
11160	39.75	AV	93	2.4	V	6.40	46.15	54	-7.85
5700MHz									
5725	67.30	PK	138	2	H	-2.73	64.57	68.2	-3.63
5725	66.53	PK	130	2.2	V	-2.73	63.80	68.2	-4.40
5745	67.25	PK	258	1	H	-3.07	64.18	68.2	-4.02
5745	65.76	PK	81	1.2	V	-3.07	62.69	68.2	-5.51
11400	54.07	PK	86	1.1	H	6.91	60.98	74	-13.02
11400	40.19	AV	89	1.1	H	6.91	47.10	54	-6.90
11400	53.58	PK	268	1.9	V	6.91	60.49	74	-13.51
11400	39.64	AV	208	1.9	V	6.91	46.55	54	-7.45

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5510MHz									
5460	67.44	PK	212	1.1	H	-3.24	64.20	74	-9.80
5460	50.45	AV	212	1.1	H	-3.24	47.21	54	-6.79
5460	67.07	PK	207	2.2	V	-3.24	63.83	74	-10.17
5460	49.66	AV	207	2.2	V	-3.24	46.42	54	-7.58
5470	67.94	PK	180	2.4	H	-3.20	64.74	68.2	-3.46
5470	67.59	PK	254	1.3	V	-3.20	64.39	68.2	-3.81
11020	53.23	PK	328	1.3	H	6.44	59.67	74	-14.33
11020	40.18	AV	195	1.3	H	6.44	46.62	54	-7.38
11020	52.87	PK	46	2.4	V	6.44	59.31	74	-14.69
11020	39.96	AV	163	2.4	V	6.44	46.40	54	-7.60
5550MHz									
11100	54.10	PK	278	2	H	5.95	60.05	74	-13.95
11100	40.93	AV	304	2	H	5.95	46.88	54	-7.12
11100	53.49	PK	214	1.3	V	5.95	59.44	74	-14.56
11100	40.21	AV	228	1.3	V	5.95	46.16	54	-7.84
5670MHz									
5725	67.60	PK	179	1.9	H	-2.73	64.87	68.2	-3.33
5725	66.47	PK	225	1.5	V	-2.73	63.74	68.2	-4.46
5745	67.36	PK	71	1.2	H	-3.07	64.29	68.2	-3.91
5745	65.58	PK	354	2.5	V	-3.07	62.51	68.2	-5.69
11340	53.67	PK	46	1.3	H	6.84	60.51	74	-13.49
11340	40.52	AV	191	1.3	H	6.84	47.36	54	-6.64
11340	53.16	PK	284	2.2	V	6.84	60.00	74	-14.00
11340	40.39	AV	309	2.2	V	6.84	47.23	54	-6.77

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5530MHz									
5460	66.20	PK	64	1.3	H	-3.24	62.96	74	-11.04
5460	52.21	AV	64	1.3	H	-3.24	48.97	54	-5.03
5460	65.45	PK	264	1.3	V	-3.24	62.21	74	-11.79
5460	51.79	AV	264	1.3	V	-3.24	48.55	54	-5.45
5470	67.20	PK	76	1.1	H	-3.20	64.00	68.2	-4.20
5470	66.12	PK	211	1.5	V	-3.20	62.92	68.2	-5.28
11060	53.58	PK	93	2	H	6.16	59.74	74	-14.26
11060	41.11	AV	325	2	H	6.16	47.27	54	-6.73
11060	52.94	PK	238	1.1	V	6.16	59.10	74	-14.90
11060	40.72	AV	324	1.1	V	6.16	46.88	54	-7.12
5610MHz									
5725	63.04	PK	335	2.2	H	-2.73	60.31	68.2	-7.89
5725	62.66	PK	144	1.2	V	-2.73	59.93	68.2	-8.27
5745	62.79	PK	238	2.3	H	-3.07	59.72	68.2	-8.48
5745	62.45	PK	148	2	V	-3.07	59.38	68.2	-8.82
11220	53.57	PK	290	1.6	H	6.53	60.10	74	-13.90
11220	41.08	AV	219	1.6	H	6.53	47.61	54	-6.39
11220	53.06	PK	178	2	V	6.53	59.59	74	-14.41
11220	40.79	AV	109	2	V	6.53	47.32	54	-6.68

5725-5850 MHz:

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11A									
5745MHz									
5650	62.96	PK	243	1.4	H	-3.64	59.32	68.2	-8.88
5700	62.06	PK	272	2.4	H	-2.30	59.76	105.2	-45.44
5720	71.62	PK	100	1.5	H	-2.64	68.98	110.8	-41.82
5725	76.56	PK	87	2.5	H	-2.73	73.83	122.2	-48.37
5650	62.81	PK	134	1	V	-3.64	59.17	68.2	-9.03
5700	61.92	PK	204	2.5	V	-2.30	59.62	105.2	-45.58
5720	70.60	PK	64	1.4	V	-2.64	67.96	110.8	-42.84
5725	75.52	PK	293	2.4	V	-2.73	72.79	122.2	-49.41
11490	52.12	PK	324	1.8	H	7.00	59.12	74	-14.88
11490	38.50	AV	168	1.8	H	7.00	45.50	54	-8.50
11490	51.85	PK	281	2.4	V	7.00	58.85	74	-15.15
11490	38.34	AV	46	2.4	V	7.00	45.34	54	-8.66
5785MHz									
11570	53.34	PK	206	2	H	6.60	59.94	74	-14.06
11570	39.25	AV	294	2	H	6.60	45.85	54	-8.15
11570	52.63	PK	145	1.4	V	6.60	59.23	74	-14.77
11570	39.02	AV	337	1.4	V	6.60	45.62	54	-8.38
5825MHz									
5850	74.09	PK	194	1.6	H	-1.37	72.72	122.2	-49.48
5855	69.61	PK	171	1.8	H	-1.25	68.36	110.8	-42.44
5875	61.68	PK	45	1.9	H	-0.75	60.93	105.2	-44.27
5925	61.00	PK	338	1.6	H	-0.46	60.54	68.2	-7.66
5850	72.36	PK	105	2.5	V	-1.37	70.99	122.2	-51.21
5855	68.40	PK	151	1	V	-1.25	67.15	110.8	-43.65
5875	61.37	PK	301	2.3	V	-0.75	60.62	105.2	-44.58
5925	60.74	PK	72	1.4	V	-0.46	60.28	68.2	-7.92
11650	54.37	PK	346	1.1	H	5.55	59.92	74	-14.08
11650	40.09	AV	211	1.1	H	5.55	45.64	54	-8.36
11650	54.12	PK	114	2.3	V	5.55	59.67	74	-14.33
11650	39.90	AV	23	2.3	V	5.55	45.45	54	-8.55

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC20									
5745MHz									
5650	63.06	PK	175	1.3	H	-3.64	59.42	68.2	-8.78
5700	62.49	PK	204	1.2	H	-2.30	60.19	105.2	-45.01
5720	68.12	PK	144	1.1	H	-2.64	65.48	110.8	-45.32
5725	77.11	PK	326	1.7	H	-2.73	74.38	122.2	-47.82
5650	62.60	PK	113	1.5	V	-3.64	58.96	68.2	-9.24
5700	62.05	PK	5	1.3	V	-2.30	59.75	105.2	-45.45
5720	67.03	PK	160	1.8	V	-2.64	64.39	110.8	-46.41
5725	76.58	PK	285	1.1	V	-2.73	73.85	122.2	-48.35
11490	52.09	PK	88	2.2	H	7.00	59.09	74	-14.91
11490	38.31	AV	141	2.2	H	7.00	45.31	54	-8.69
11490	52.40	PK	308	1.5	V	7.00	59.40	74	-14.60
11490	38.55	AV	4	1.5	V	7.00	45.55	54	-8.45
5785MHz									
11570	52.51	PK	16	1.9	H	6.60	59.11	74	-14.89
11570	39.25	AV	146	1.9	H	6.60	45.85	54	-8.15
11570	52.80	PK	350	2.3	V	6.60	59.40	74	-14.60
11570	39.63	AV	198	2.3	V	6.60	46.23	54	-7.77
5825MHz									
5850	74.50	PK	292	1.4	H	-1.37	73.13	122.2	-49.07
5855	70.44	PK	40	2.3	H	-1.25	69.19	110.8	-41.61
5875	62.42	PK	187	2.2	H	-0.75	61.67	105.2	-43.53
5925	61.01	PK	105	1.9	H	-0.46	60.55	68.2	-7.65
5850	73.54	PK	176	1.9	V	-1.37	72.17	122.2	-50.03
5855	69.49	PK	201	1.7	V	-1.25	68.24	110.8	-42.56
5875	61.15	PK	129	2.4	V	-0.75	60.40	105.2	-44.80
5925	60.65	PK	178	2.2	V	-0.46	60.19	68.2	-8.01
11650	52.90	PK	242	1.1	H	5.55	58.45	74	-15.55
11650	40.20	AV	286	1.1	H	5.55	45.75	54	-8.25
11650	53.13	PK	333	1.1	V	5.55	58.68	74	-15.32
11650	40.52	AV	194	1.1	V	5.55	46.07	54	-7.93

Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC40									
5755MHz									
5650	63.25	PK	86	2.3	H	-3.64	59.61	68.2	-8.59
5700	63.38	PK	42	1.7	H	-2.30	61.08	105.2	-44.12
5720	78.56	PK	102	1.5	H	-2.64	75.92	110.8	-34.88
5725	79.92	PK	51	2.3	H	-2.73	77.19	122.2	-45.01
5650	62.67	PK	319	2.4	V	-3.64	59.03	68.2	-9.17
5700	61.77	PK	213	1.5	V	-2.30	59.47	105.2	-45.73
5720	77.49	PK	266	2.5	V	-2.64	74.85	110.8	-35.95
5725	78.55	PK	327	2.4	V	-2.73	75.82	122.2	-46.38
11510	52.64	PK	12	1.6	H	7.06	59.70	74	-14.30
11510	38.96	AV	173	1.6	H	7.06	46.02	54	-7.98
11510	52.87	PK	14	2.4	V	7.06	59.93	74	-14.07
11510	39.48	AV	183	2.4	V	7.06	46.54	54	-7.46
5795MHz									
5850	69.30	PK	298	2.3	H	-1.37	67.93	122.2	-54.27
5855	66.95	PK	86	2.5	H	-1.25	65.70	110.8	-45.10
5875	61.80	PK	89	2.2	H	-0.75	61.05	105.2	-44.15
5925	61.10	PK	330	1.6	H	-0.46	60.64	68.2	-7.56
5850	68.30	PK	21	1	V	-1.37	66.93	122.2	-55.27
5855	65.47	PK	194	1.5	V	-1.25	64.22	110.8	-46.58
5875	61.48	PK	305	1.4	V	-0.75	60.73	105.2	-44.47
5925	60.63	PK	205	1.4	V	-0.46	60.17	68.2	-8.03
11590	53.49	PK	139	2.5	H	6.43	59.92	74	-14.08
11590	39.84	AV	202	2.5	H	6.43	46.27	54	-7.73
11590	53.81	PK	340	1.2	V	6.43	60.24	74	-13.76
11590	40.25	AV	346	1.2	V	6.43	46.68	54	-7.32

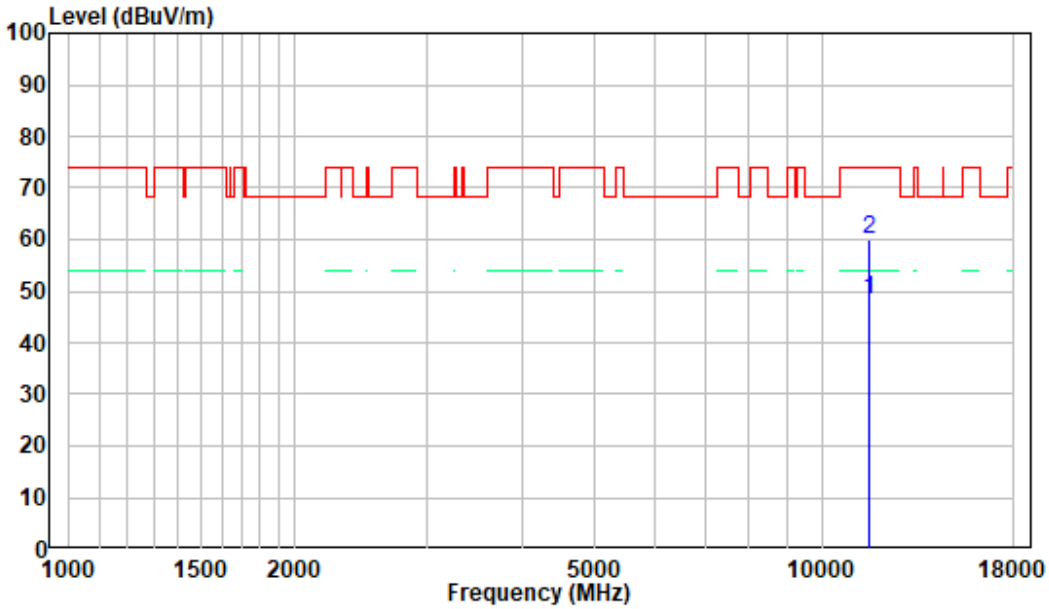
Frequency (MHz)	Receiver		Turntable Angle Degree	Rx Antenna		Factor (dB/m)	Corrected Amplitude (dBμV/m)	Limit (dBμV/m)	Margin (dB)
	Reading (dBμV)	PK/Ave		Height (m)	Polar (H/V)				
802.11AC80									
5775MHz									
5650	63.38	PK	188	1.4	H	-3.64	59.74	68.2	-8.46
5700	72.02	PK	63	1.5	H	-2.30	69.72	105.2	-35.48
5720	75.32	PK	170	2.3	H	-2.64	72.68	110.8	-38.12
5725	76.80	PK	245	1.2	H	-2.73	74.07	122.2	-48.13
5650	62.99	PK	26	1.7	V	-3.64	59.35	68.2	-8.85
5700	70.66	PK	257	1.3	V	-2.30	68.36	105.2	-36.84
5720	74.14	PK	236	2.5	V	-2.64	71.50	110.8	-39.30
5725	75.43	PK	208	1.3	V	-2.73	72.70	122.2	-49.50
5850	73.33	PK	30	2.2	H	-1.37	71.96	122.2	-50.24
5855	72.23	PK	218	1.3	H	-1.25	70.98	110.8	-39.82
5875	67.65	PK	252	1.2	H	-0.75	66.90	105.2	-38.30
5925	62.98	PK	30	2.2	H	-0.46	62.52	68.2	-5.68
5850	72.41	PK	333	1.2	V	-1.37	71.04	122.2	-51.16
5855	71.21	PK	34	2.3	V	-1.25	69.96	110.8	-40.84
5875	65.76	PK	132	1.5	V	-0.75	65.01	105.2	-40.19
5925	61.66	PK	32	1.1	V	-0.46	61.20	68.2	-7.00
11550	53.24	PK	284	2.3	H	6.77	60.01	74	-13.99
11550	41.37	AV	17	2.3	H	6.77	48.14	54	-5.86
11550	53.06	PK	249	1.7	V	6.77	59.83	74	-14.17
11550	41.21	AV	358	1.7	V	6.77	47.98	54	-6.02

Note:
Factor = Antenna factor (RX) + Cable Loss – Amplifier Factor
Corrected Amplitude = Factor + Reading
Margin = Corrected. Amplitude - Limit
The other spurious emission which is in the noise floor level was not recorded.

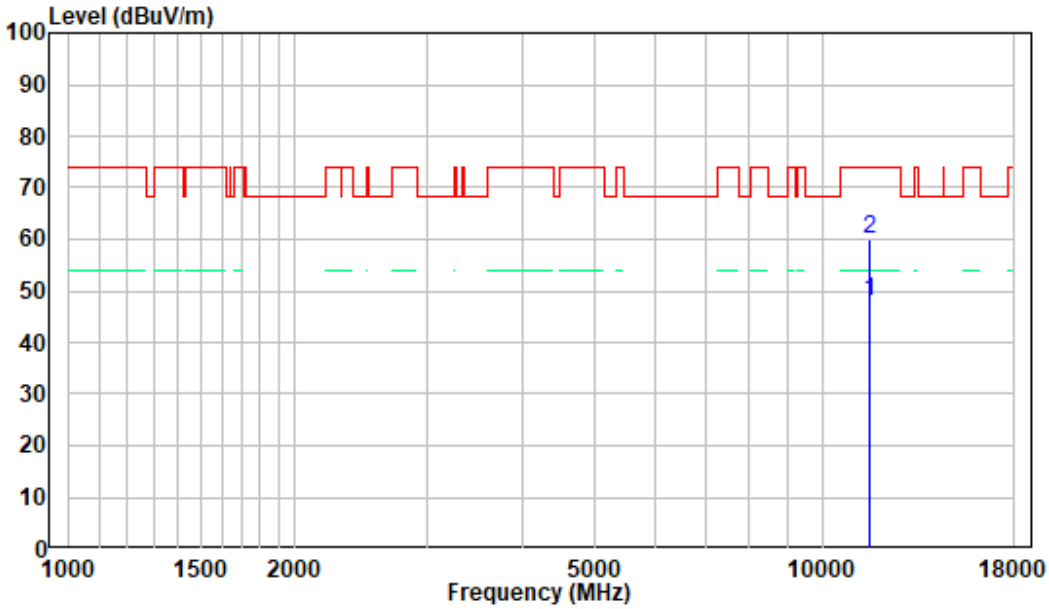
1 GHz - 18 GHz: (Pre-Scan plots)

802.11ac80, 5775MHz

Horizontal



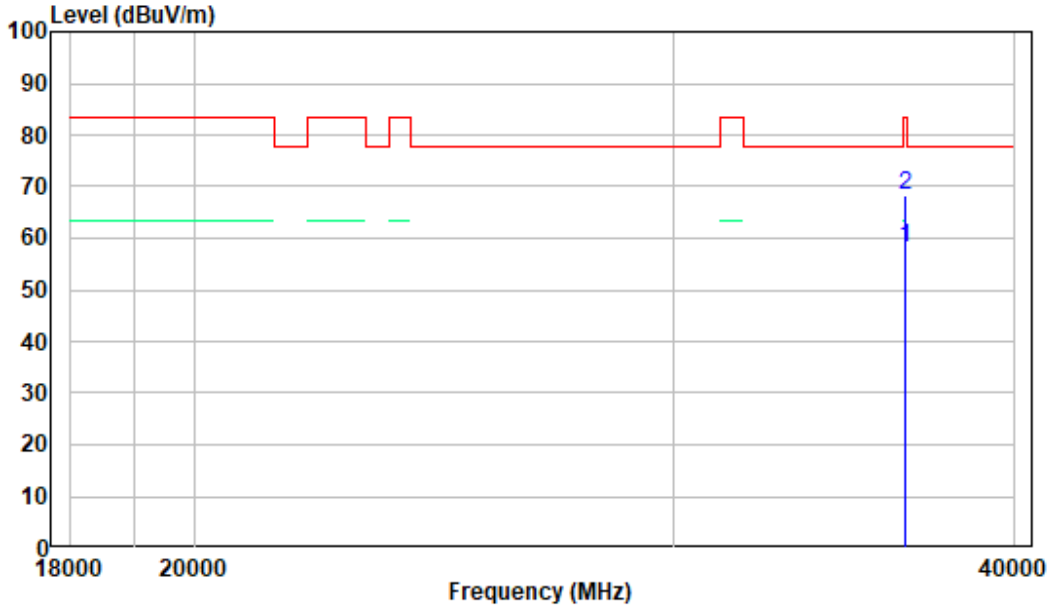
Vertical



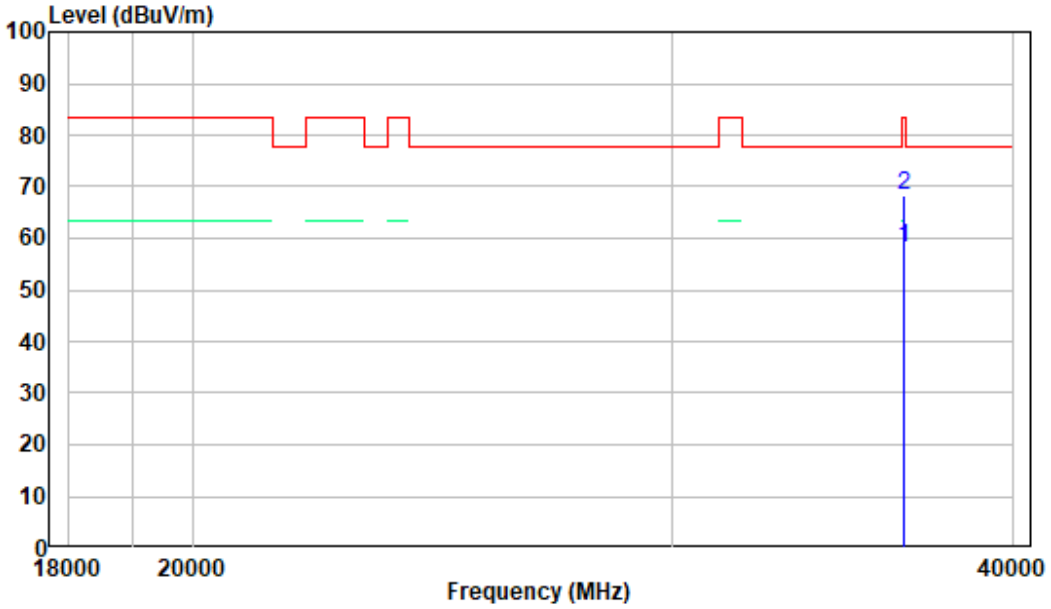
18-40GHz: (Pre-Scan plots)

802.11ac80, 5775MHz

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.

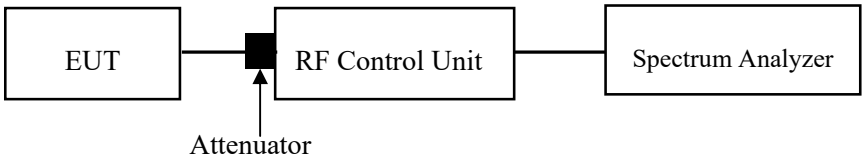
Within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

Test Procedure

According to KDB789033 D02 section II.C and section II.D

1. Emission Bandwidth (EBW)
a) Set RBW = approximately 1% of the emission bandwidth.
b) Set the VBW > RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) 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:
a) Set RBW = 100 kHz.
b) Set the video bandwidth (VBW) ≥ 3 × RBW.
c) Detector = Peak.
d) Trace mode = max hold.
e) Sweep = auto couple.
f) Allow the trace to stabilize.
g) 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:	25.5 ℃
Relative Humidity:	61 %
ATM Pressure:	101.0 kPa

The testing was performed by Jacob Huang on 2023-05-09.

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.

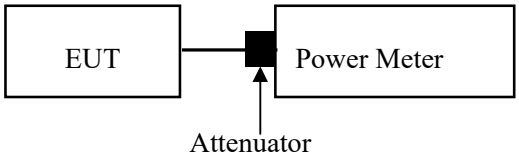
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 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

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method PM-G should be applied

a. Place the EUT on a bench and set it in transmitting mode.
b. Remove the antenna from the EUT and then connect a low loss RF cable from the antenna port to one test equipment.



Test Data

Environmental Conditions

Temperature:	25.5 ℃
Relative Humidity:	61 %
ATM Pressure:	101.0 kPa

The testing was performed by Jacob Huang on 2023-05-09.

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.

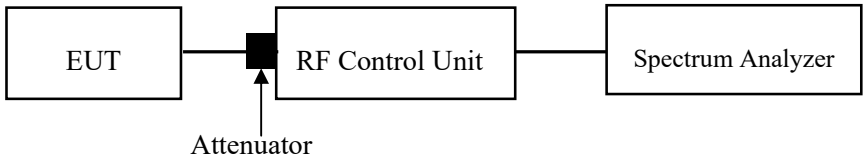
For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26 dB emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 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

According to KDB 789033 D02 General UNII Test Procedures New Rules v02r01 Method SA-2 should be applied

a) Set span to encompass the entire EBW (or, alternatively, the entire 99% occupied Bandwidth) of the signal.
b) Set sweep trigger to “free run.”
c) Set RBW=1MHz or 500kHz Set VBW>3 MHz or 2MHz.
d) Number of points in sweep>2 x span/RBW.(This ensures that bin-to-bin spacing is <RBW/2. so that narrowband signals are not lost between frequency bins.)
e) Sweep time = auto.
f) Detector = power averaging (rms), if available. Otherwise, use sample detector mode.
g) Trace mode = max hold.
h) Do not use sweep triggering. Allow the sweep to “free run.”
i) Trace average at least 100 traces in power averaging (rms) mode; however, the number of traces to be averaged shall be increased above 100 as needed to ensure that the average accurately represents the true average over the on and off periods of the transmitter.
j) Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission).



Test Data

Environmental Conditions

Temperature:	25.5 ℃
Relative Humidity:	61 %
ATM Pressure:	101.0 kPa

The testing was performed by Jacob Huang on 2023-05-30.

EUT operation mode: Transmitting

Test Result: Pass

Please refer to the Appendix.

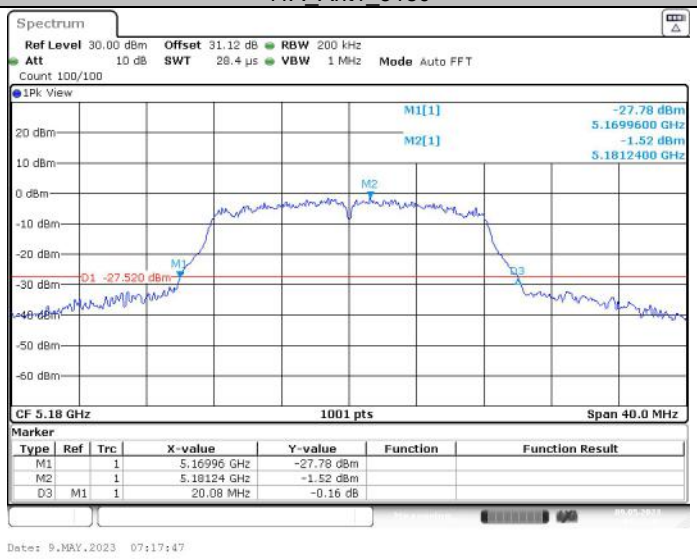
APPENDIX

Appendix A1: EmissionBandwidth
Test Result

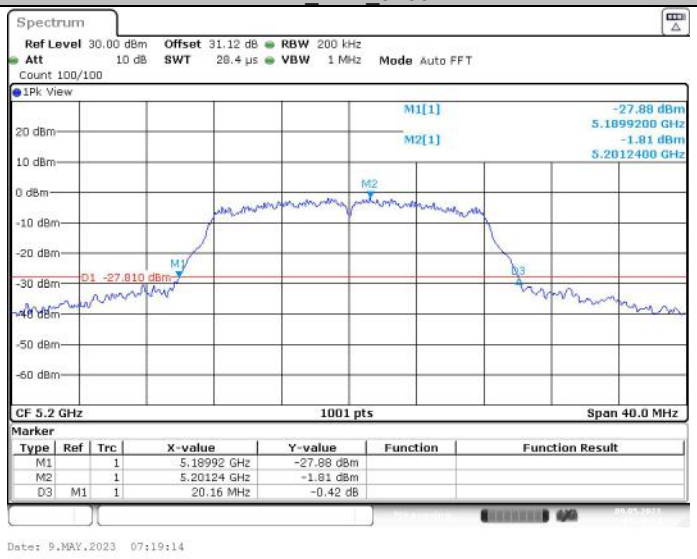
Test Mode	Antenna	Frequency[MHz]	26db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	20.08	5169.96	5190.04	---	---
		5200	20.16	5189.92	5210.08	---	---
		5240	19.96	5230.04	5250.00	---	---
		5260	20.08	5250.00	5270.08	---	---
		5280	19.84	5270.12	5289.96	---	---
		5320	19.84	5310.00	5329.84	---	---
		5500	20.72	5489.92	5510.64	---	---
		5580	19.96	5570.04	5590.00	---	---
		5700	20.00	5690.00	5710.00	---	---
11AC20SISO	Ant1	5180	20.20	5169.84	5190.04	---	---
		5200	20.36	5189.76	5210.12	---	---
		5240	20.48	5229.88	5250.36	---	---
		5260	20.44	5249.76	5270.20	---	---
		5280	20.32	5269.80	5290.12	---	---
		5320	20.84	5309.92	5330.76	---	---
		5500	20.32	5489.84	5510.16	---	---
		5580	20.28	5569.88	5590.16	---	---
		5700	20.32	5689.84	5710.16	---	---
11AC40SISO	Ant1	5190	40.96	5169.52	5210.48	---	---
		5230	40.88	5209.60	5250.48	---	---
		5270	40.80	5249.60	5290.40	---	---
		5310	40.96	5289.68	5330.64	---	---
		5510	40.48	5489.84	5530.32	---	---
		5550	40.72	5529.76	5570.48	---	---
		5670	40.80	5649.68	5690.48	---	---
11AC80SISO	Ant1	5210	88.16	5162.48	5250.64	---	---
		5290	80.96	5249.84	5330.80	---	---
		5530	80.96	5489.20	5570.16	---	---
		5610	81.12	5569.52	5650.64	---	---

Test Graphs

11A_Ant1_5180

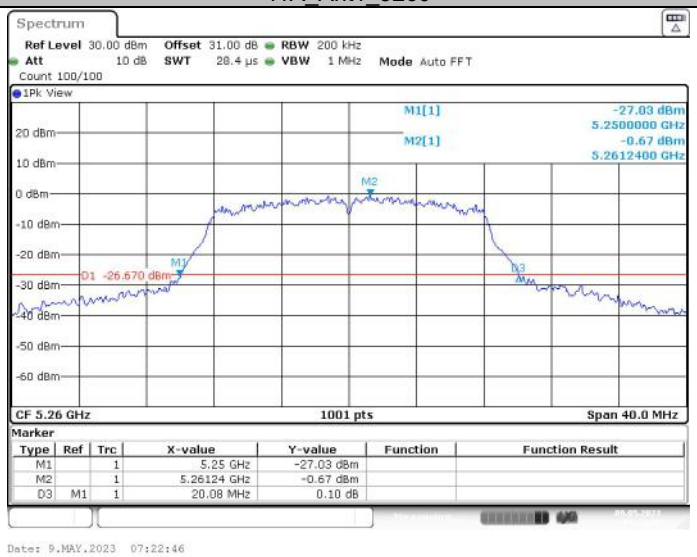


11A_Ant1_5200



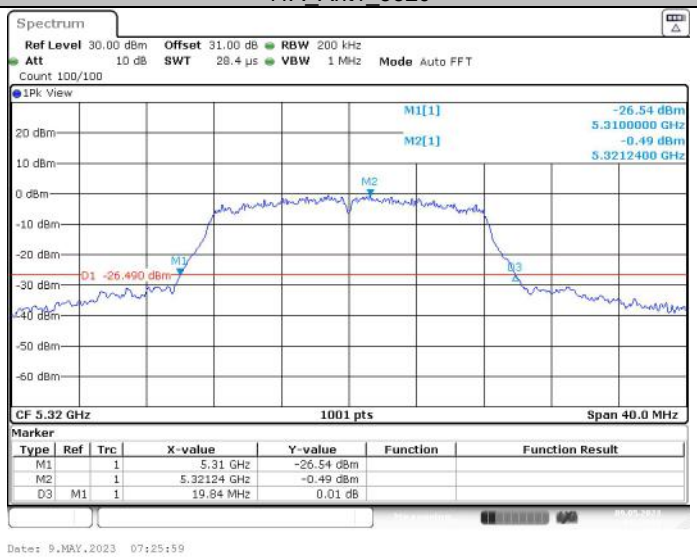
11A_Ant1_5240

11A_Ant1_5260

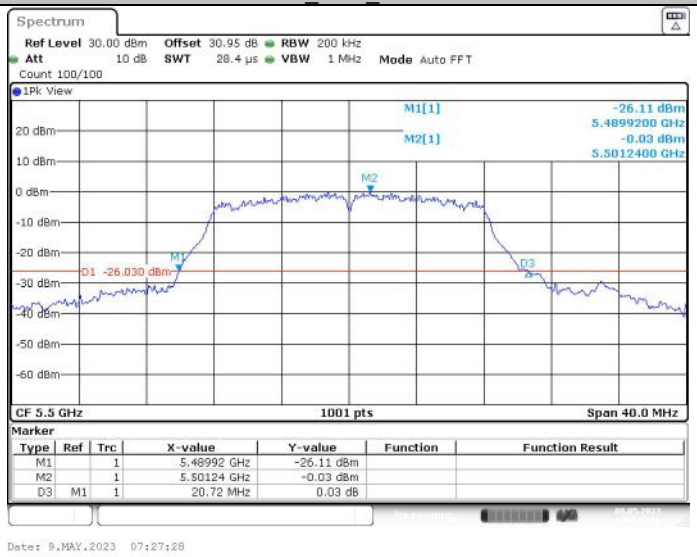


11A_Ant1_5280

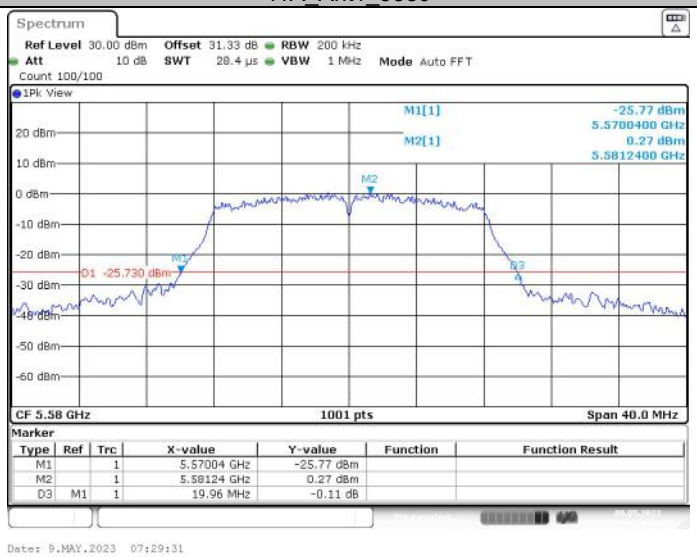
11A_Ant1_5320



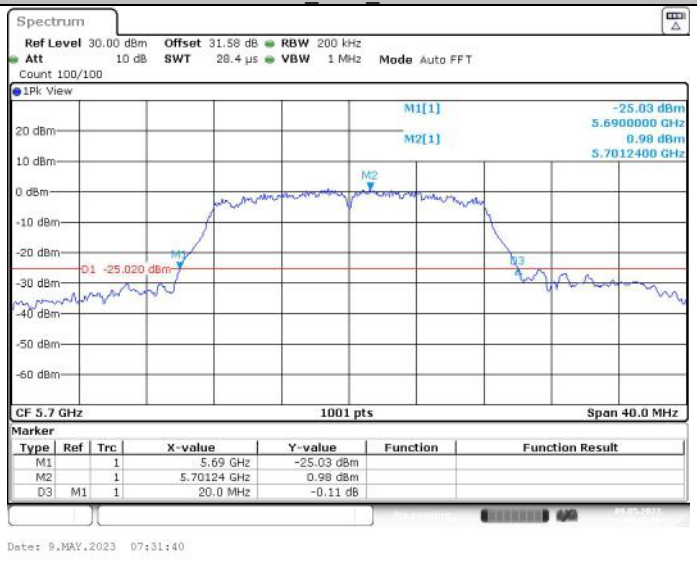
11A_Ant1_5500



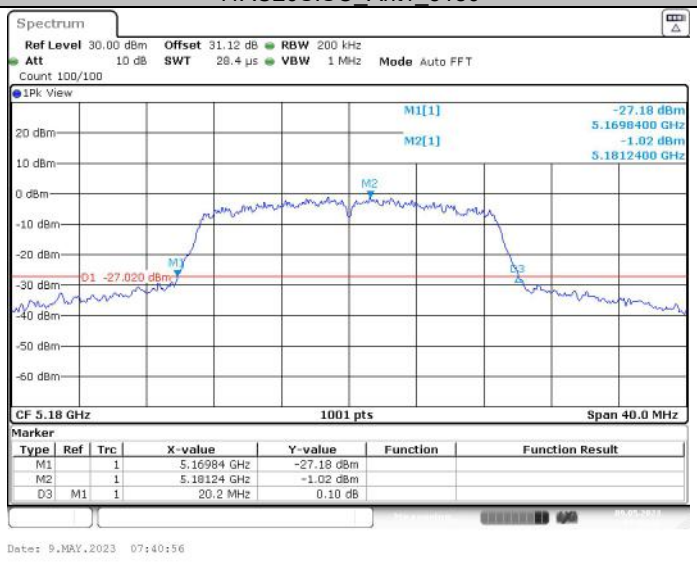
11A_Ant1_5580



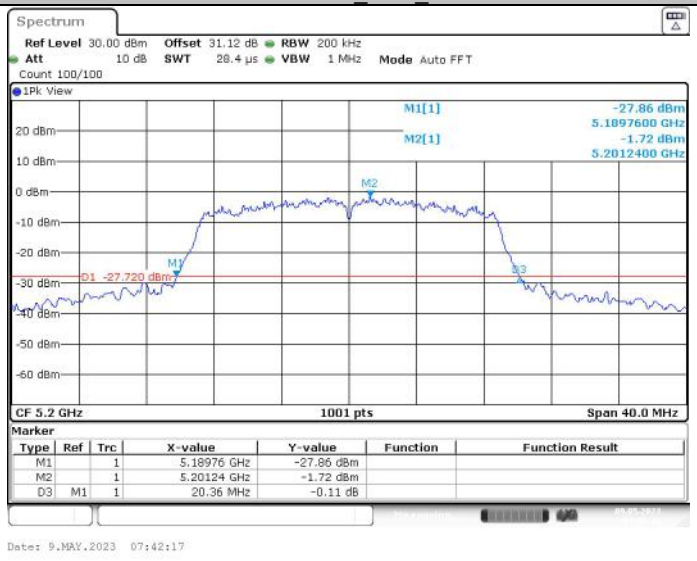
11A_Ant1_5700



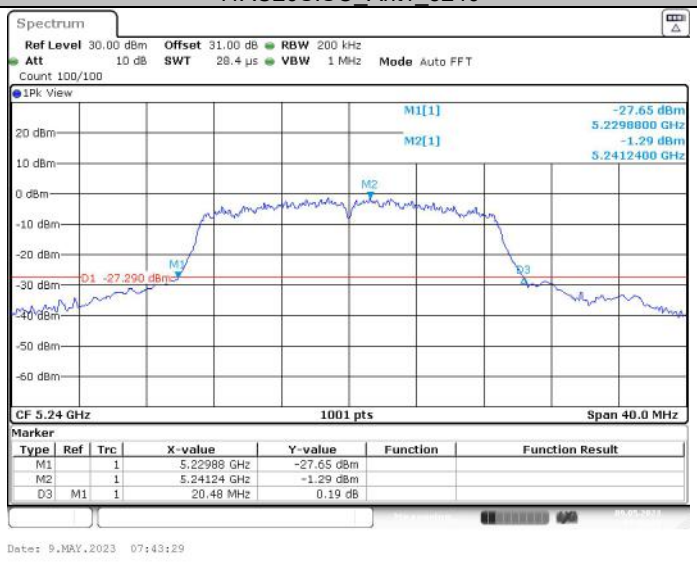
11AC20SISO_Ant1_5180



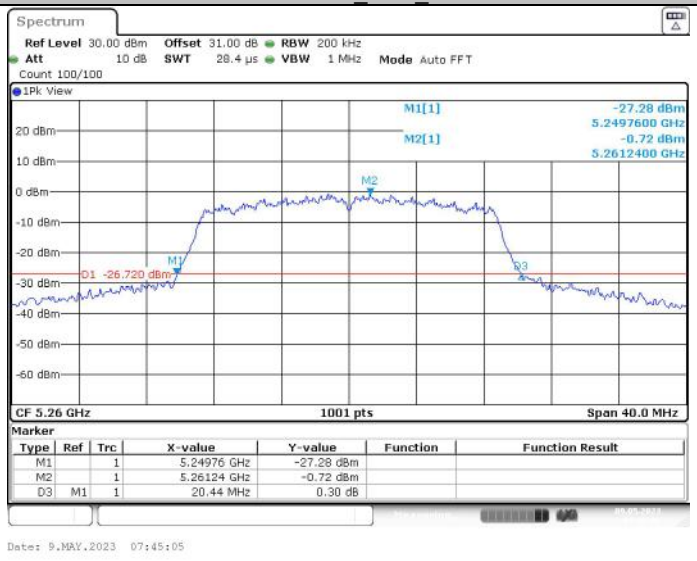
11AC20SISO_Ant1_5200



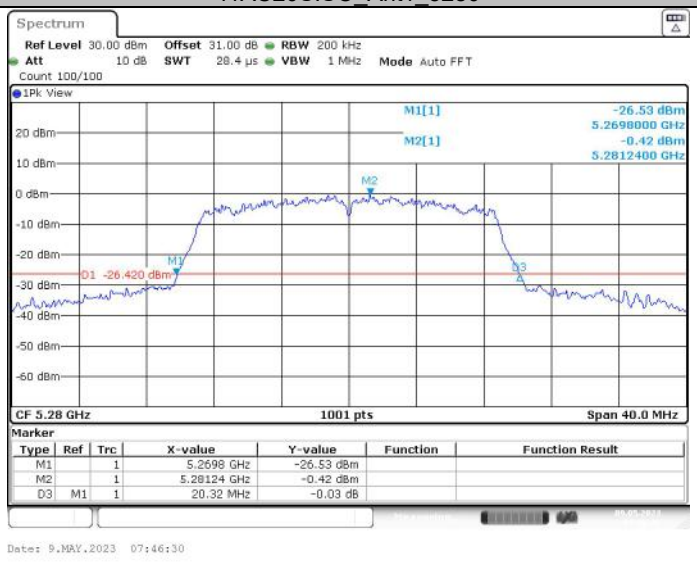
11AC20SISO_Ant1_5240



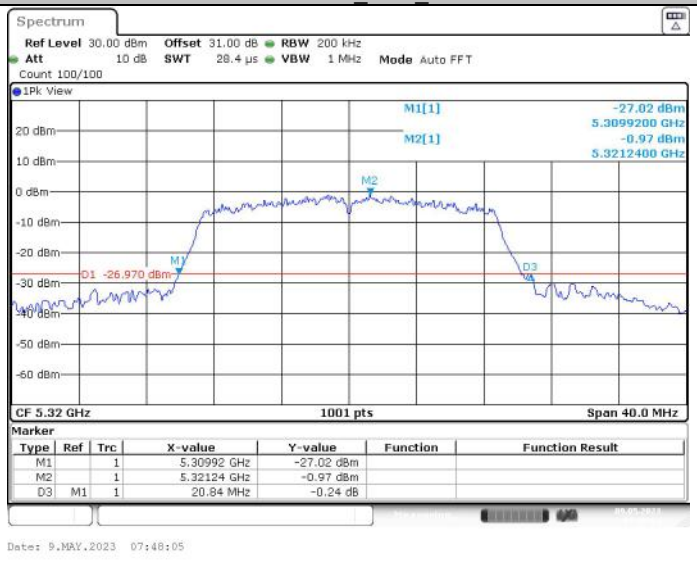
11AC20SISO_Ant1_5260



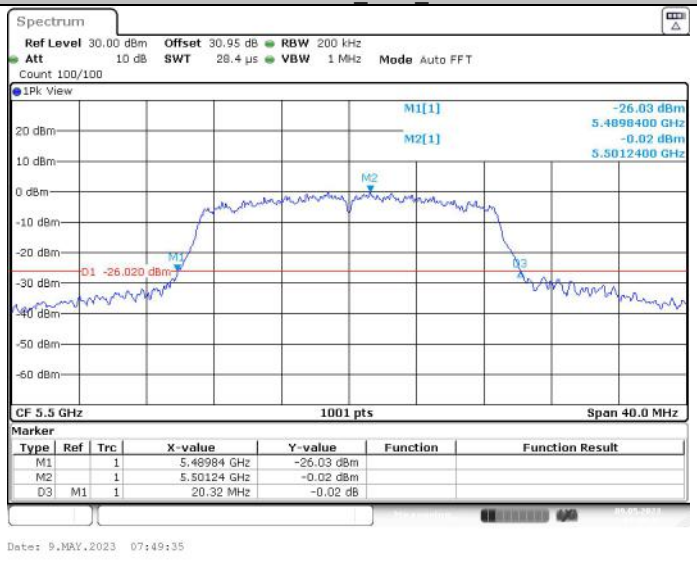
11AC20SISO_Ant1_5280



11AC20SISO_Ant1_5320



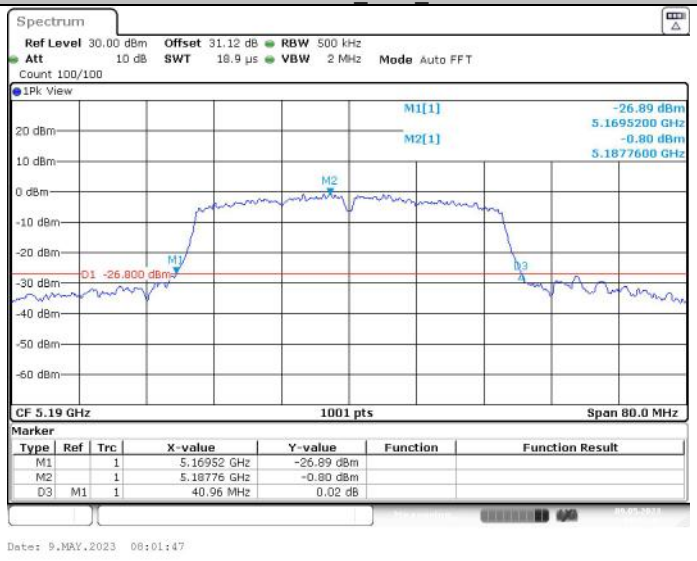
11AC20SISO_Ant1_5500



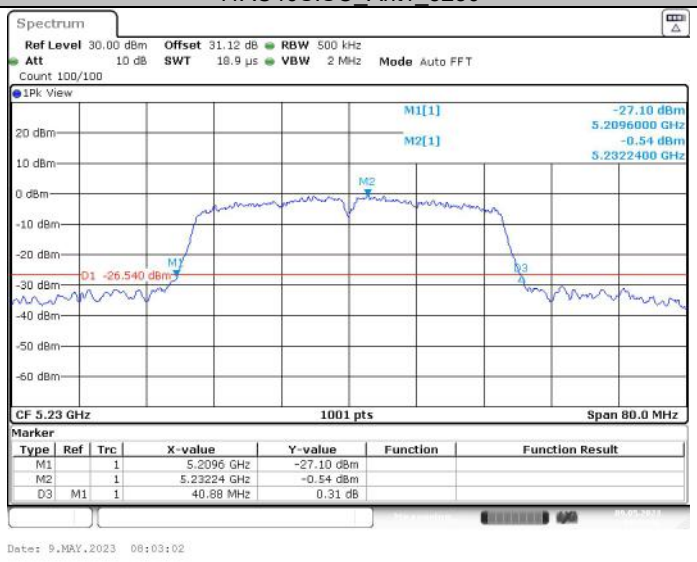
11AC20SISO_Ant1_5580

11AC20SISO_Ant1_5700

11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230

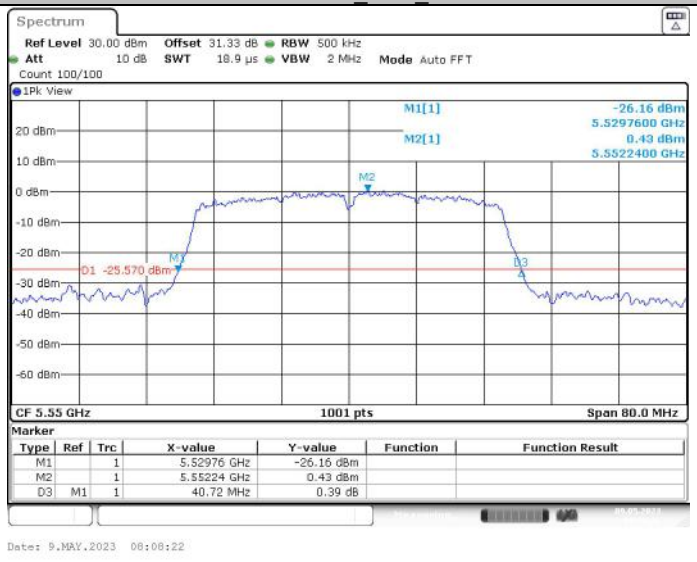


11AC40SISO_Ant1_5270

11AC40SISO_Ant1_5310

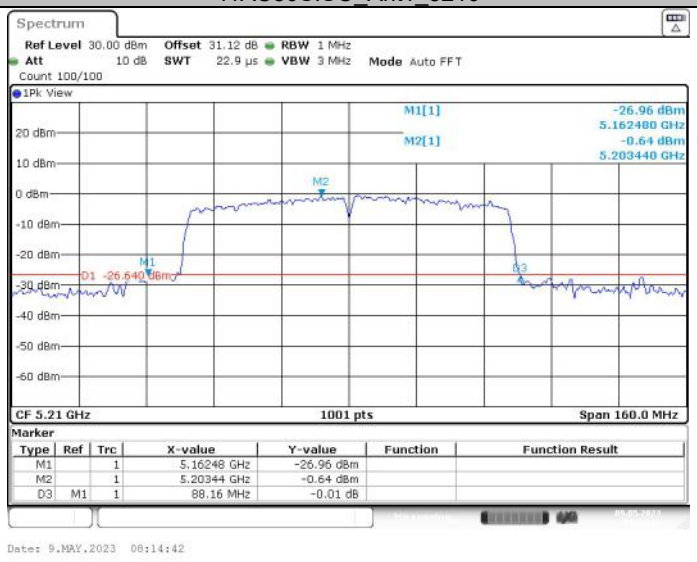
11AC40SISO_Ant1_5510

11AC40SISO_Ant1_5550

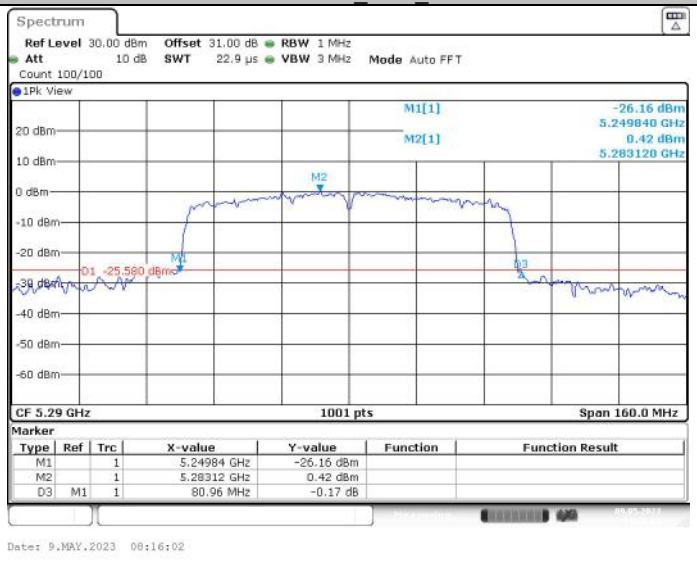


11AC40SISO_Ant1_5670

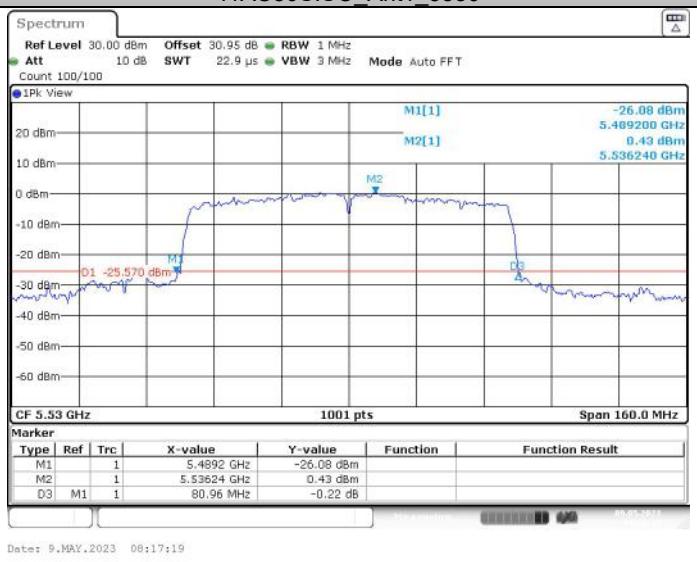
11AC80SISO_Ant1_5210



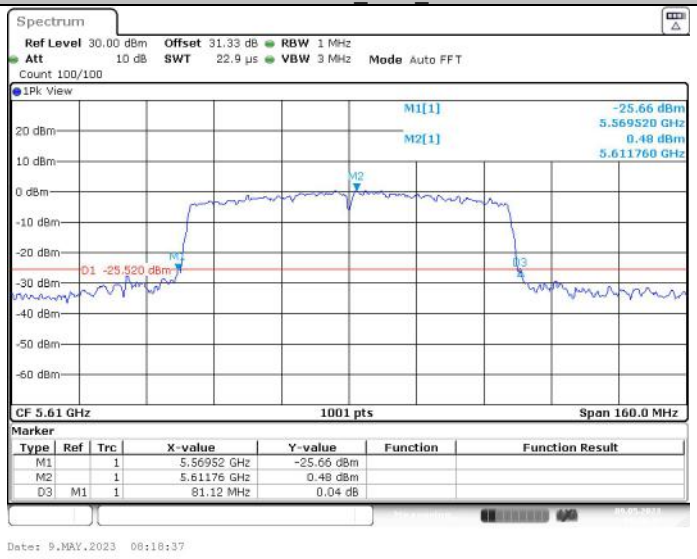
11AC80SISO_Ant1_5290



11AC80SISO_Ant1_5530



11AC80SISO_Ant1_5610



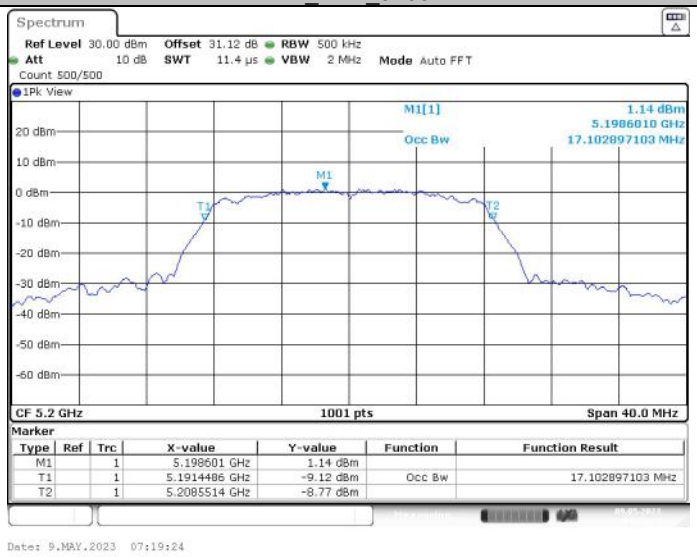
Appendix A2: Occupied channel bandwidth
Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5180	17.103	5171.409	5188.511	---	---
		5200	17.103	5191.449	5208.551	---	---
		5240	17.103	5231.449	5248.551	---	---
		5260	17.343	5251.369	5268.711	---	---
		5280	17.143	5271.449	5288.591	---	---
		5320	17.063	5311.409	5328.472	---	---
		5500	17.023	5491.528	5508.551	---	---
		5580	17.183	5571.409	5588.591	---	---
		5700	17.143	5691.449	5708.591	---	---
		5745	17.023	5736.528	5753.551	---	---
		5785	17.143	5776.489	5793.631	---	---
		5825	16.983	5816.568	5833.551	---	---
11AC20SISO	Ant1	5180	18.102	5170.889	5188.991	---	---
		5200	17.822	5191.089	5208.911	---	---
		5240	18.022	5230.969	5248.991	---	---
		5260	18.102	5250.969	5269.071	---	---
		5280	17.982	5271.009	5288.991	---	---
		5320	18.102	5311.049	5329.151	---	---
		5500	17.942	5491.009	5508.951	---	---
		5580	18.102	5571.009	5589.111	---	---
		5700	17.982	5691.009	5708.991	---	---
		5745	17.982	5736.009	5753.991	---	---
		5785	17.902	5776.009	5793.911	---	---
		5825	18.182	5815.889	5834.071	---	---
11AC40SISO	Ant1	5190	36.444	5171.858	5208.302	---	---
		5230	36.523	5211.778	5248.302	---	---
		5270	36.204	5251.858	5288.062	---	---
		5310	36.603	5291.858	5328.462	---	---
		5510	36.124	5491.858	5527.982	---	---
		5550	36.204	5531.938	5568.142	---	---
		5670	36.124	5651.938	5688.062	---	---
		5755	36.204	5736.858	5773.062	---	---
		5795	36.284	5776.938	5813.222	---	---
11AC80SISO	Ant1	5210	75.924	5172.118	5248.042	---	---
		5290	75.604	5252.278	5327.882	---	---
		5530	75.604	5492.278	5567.882	---	---
		5610	75.924	5571.958	5647.882	---	---
		5775	75.764	5737.118	5812.882	---	---

Test Graphs

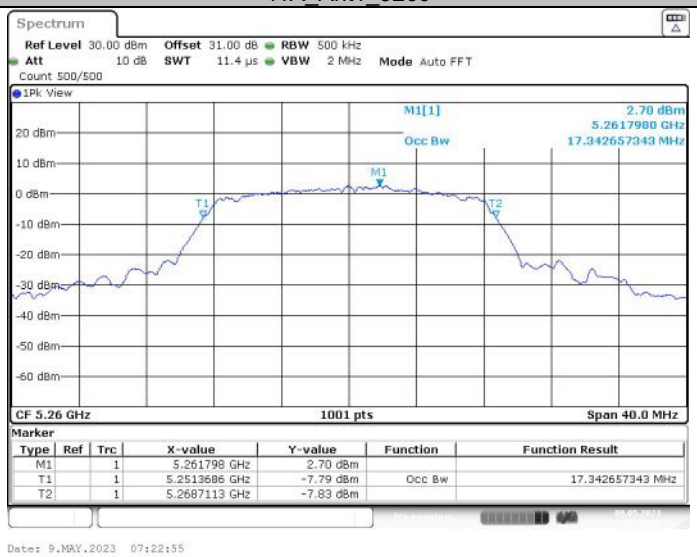
11A_Ant1_5180

11A_Ant1_5200



11A_Ant1_5240

11A_Ant1_5260



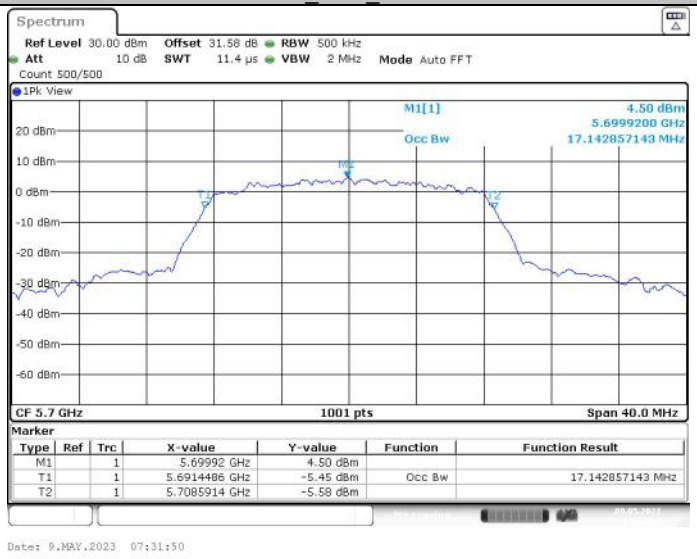
11A_Ant1_5280

11A_Ant1_5320

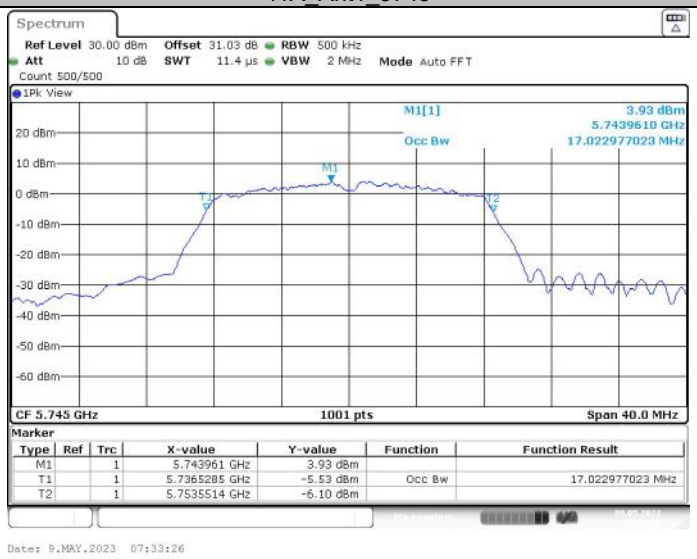
11A_Ant1_5500

11A_Ant1_5580

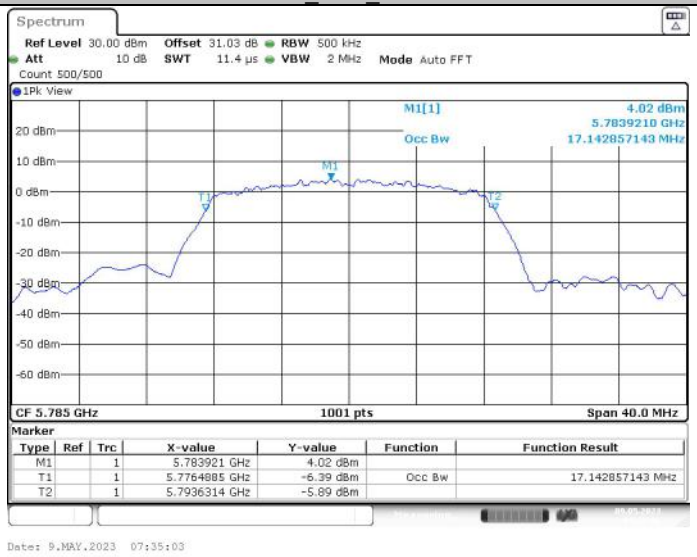
11A_Ant1_5700



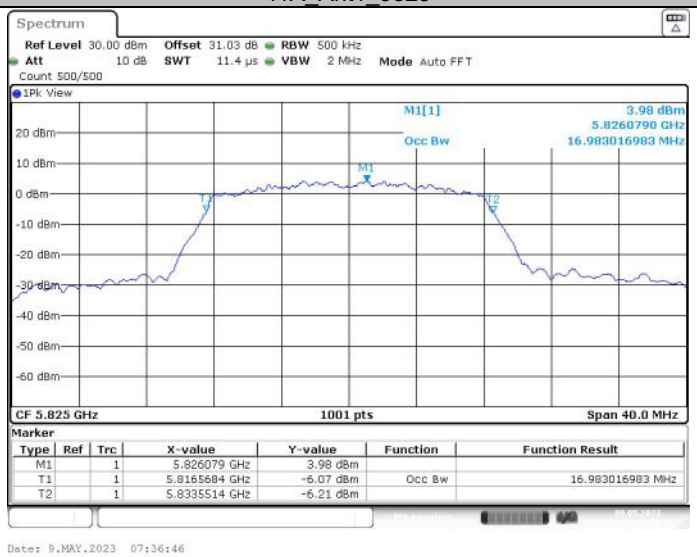
11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



11AC20SISO_Ant1_5180

11AC20SISO_Ant1_5200

11AC20SISO_Ant1_5240

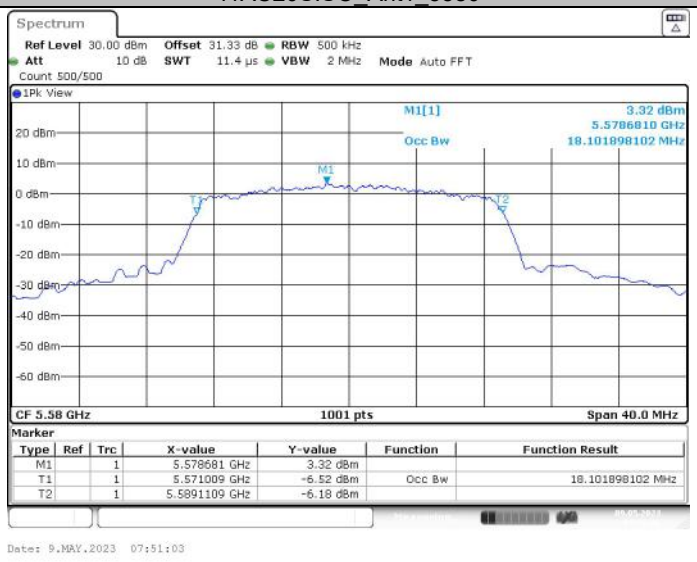
11AC20SISO_Ant1_5260

11AC20SISO_Ant1_5280

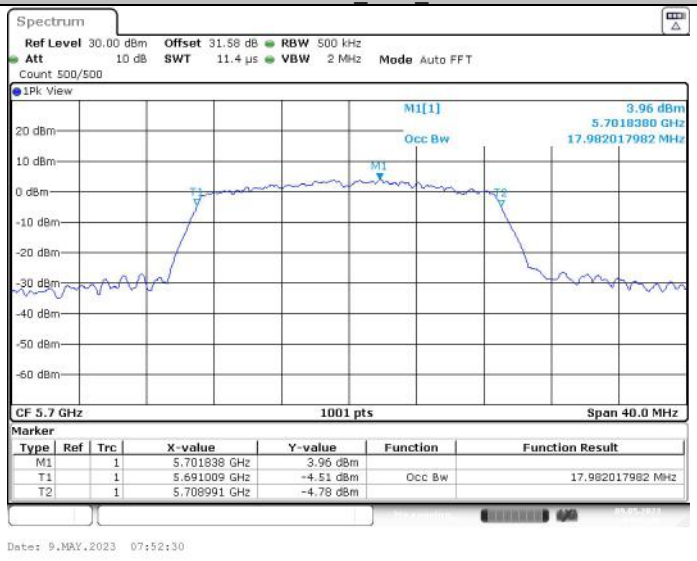
11AC20SISO_Ant1_5320

11AC20SISO_Ant1_5500

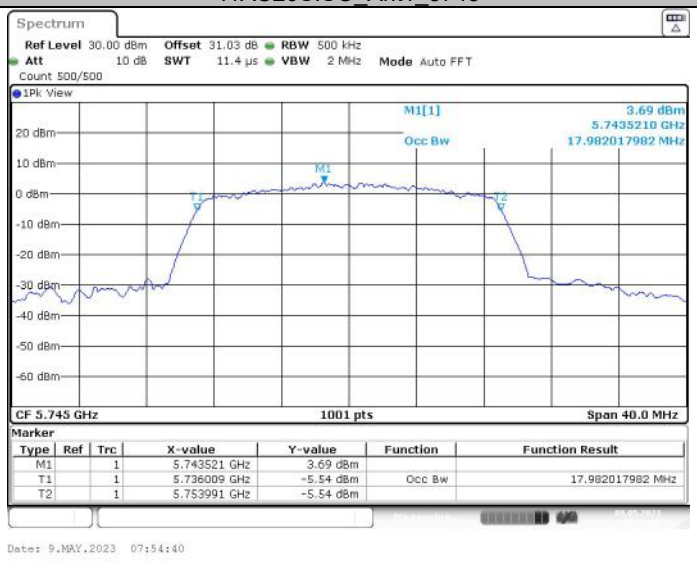
11AC20SISO_Ant1_5580



11AC20SISO_Ant1_5700

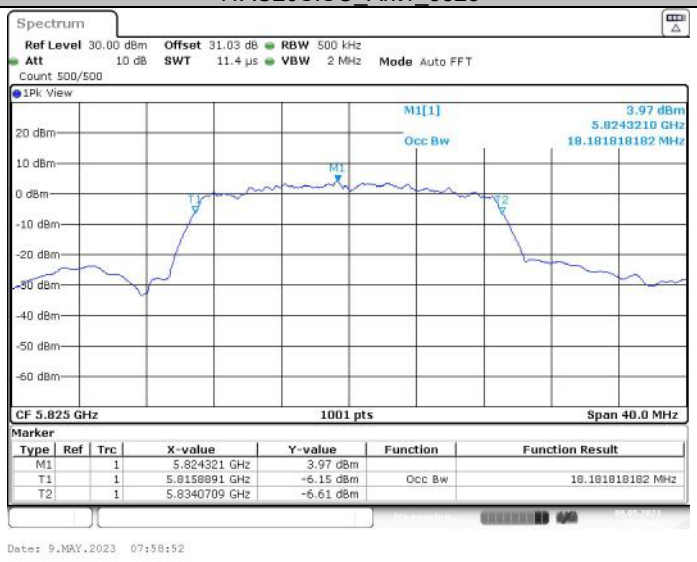


11AC20SISO_Ant1_5745

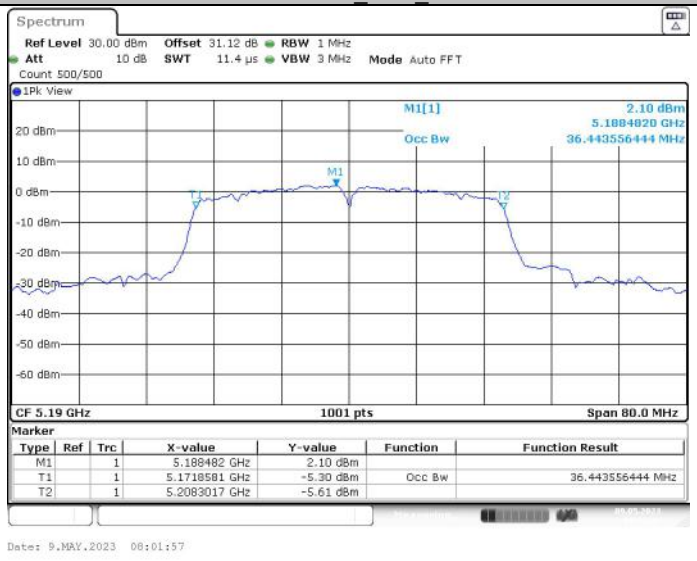


11AC20SISO_Ant1_5785

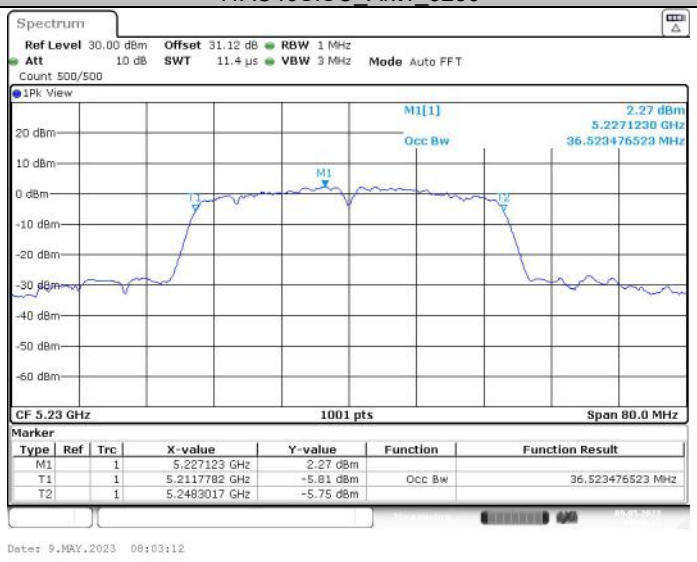
11AC20SISO_Ant1_5825



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



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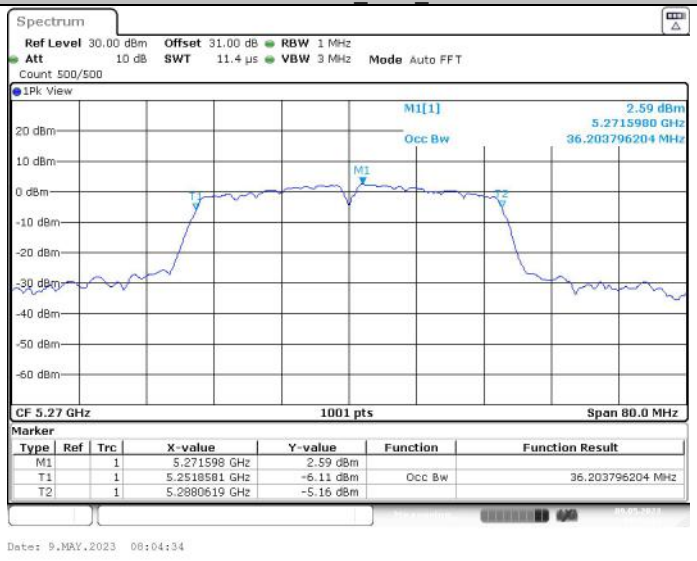

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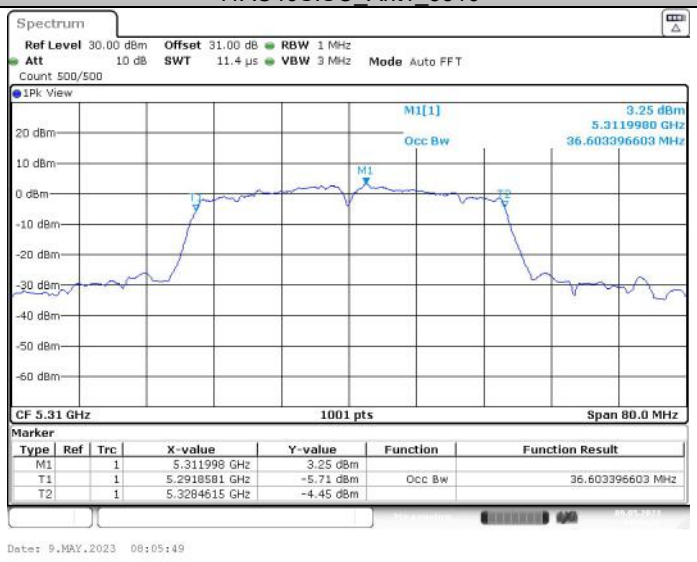

11AC40SISO_Ant1_5510

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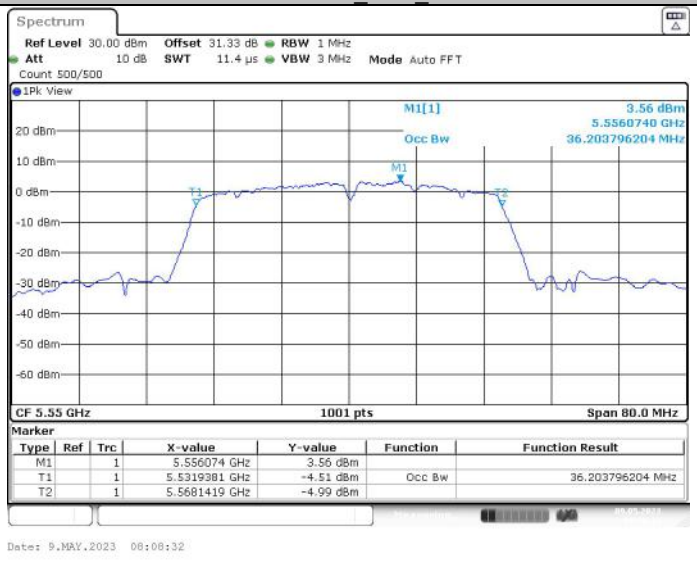

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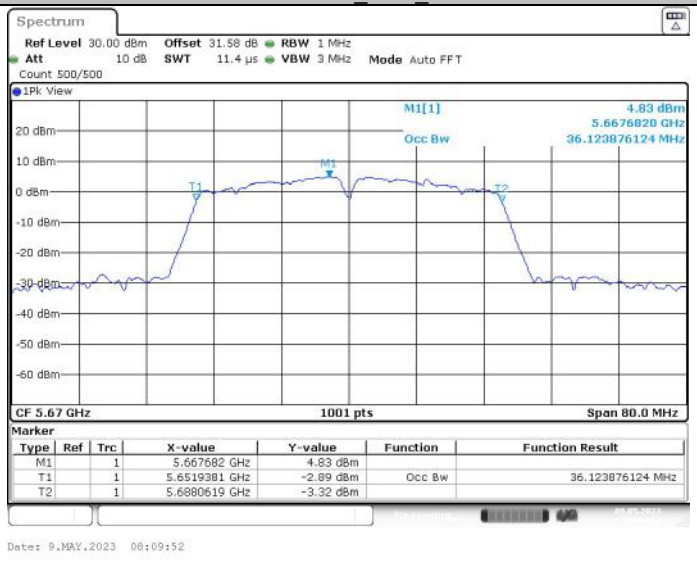

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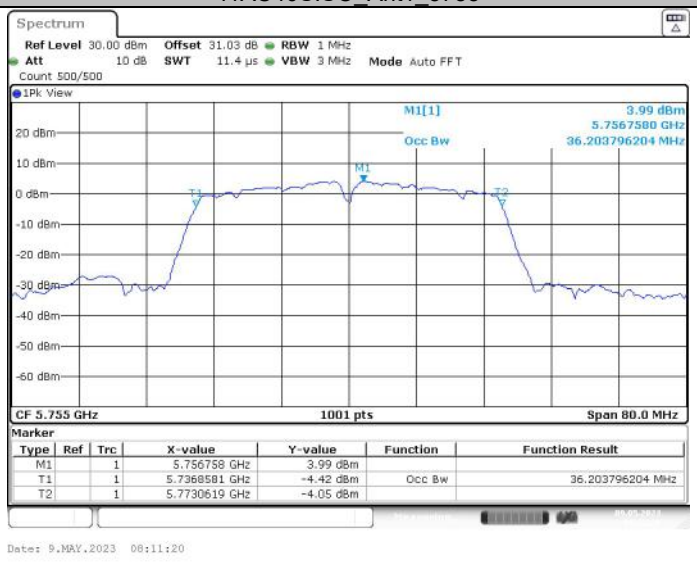

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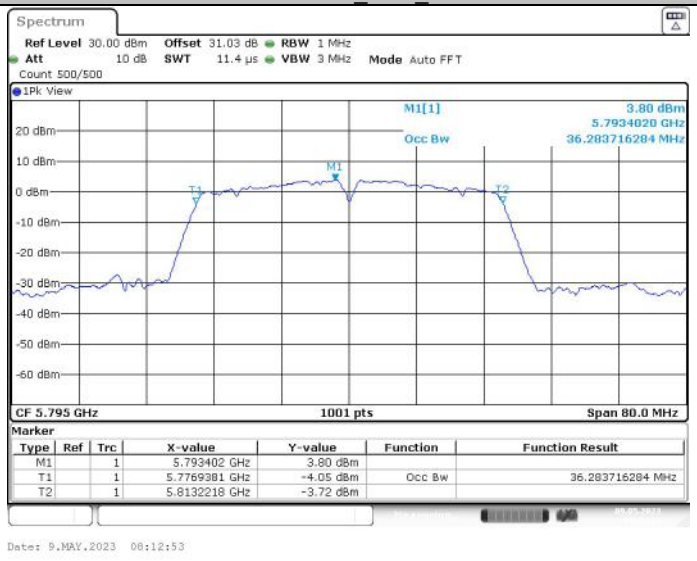
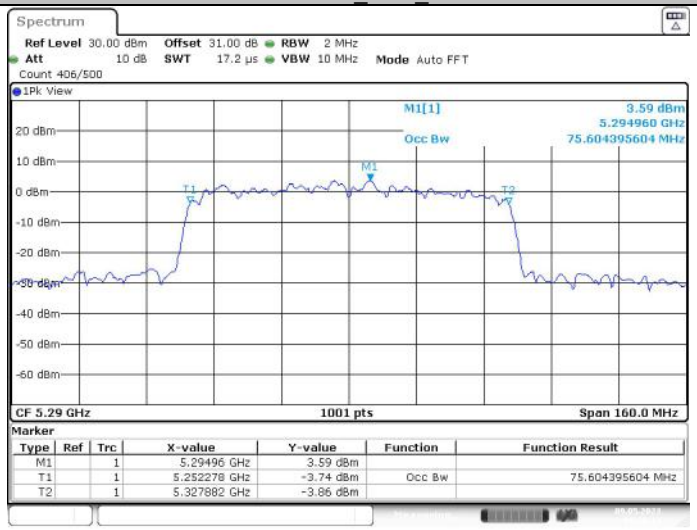


11AC80SISO_Ant1_5210

11AC80SISO_Ant1_5290



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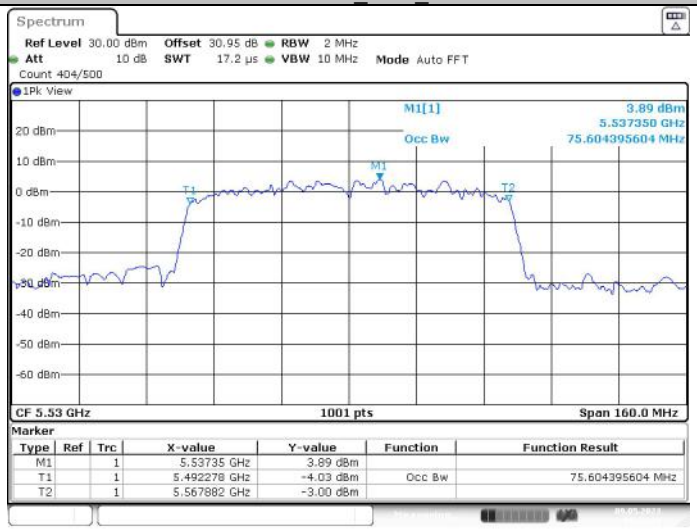
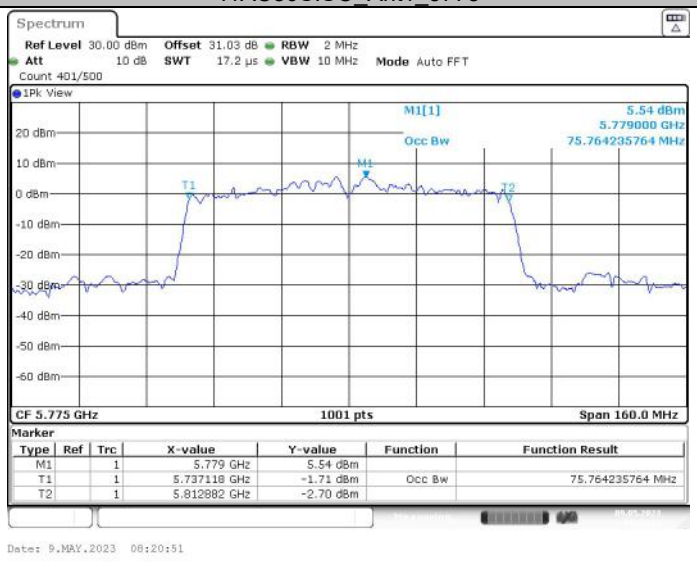


11AC80SISO_Ant1_5610

11AC80SISO_Ant1_5775

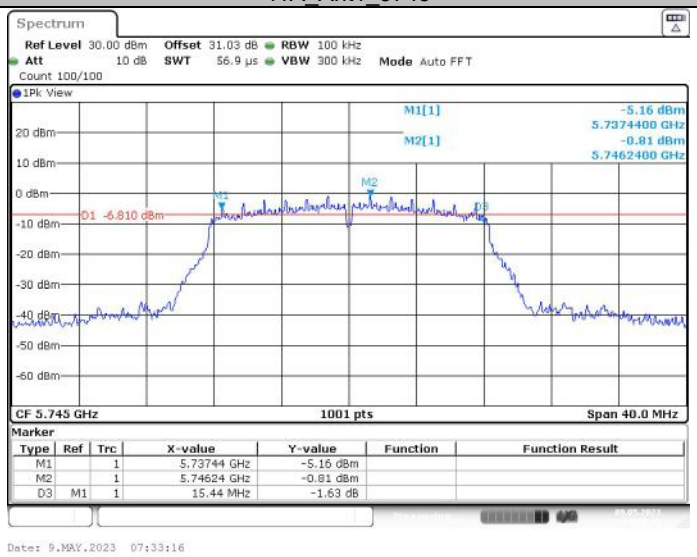


Appendix A3: Min emission bandwidth
Test Result B4

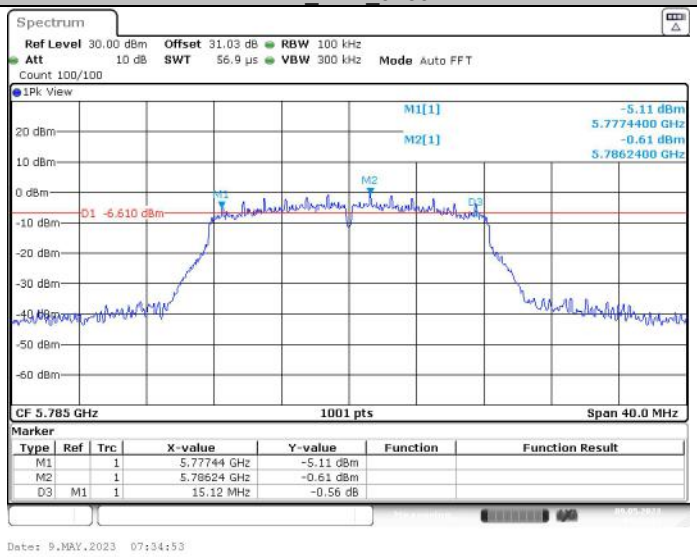
Test Mode	Antenna	Frequency[MHz]	6db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	15.44	5737.44	5752.88	0.5	PASS
		5785	15.12	5777.44	5792.56	0.5	PASS
		5825	15.12	5817.44	5832.56	0.5	PASS
11AC20SISO	Ant1	5745	15.12	5737.44	5752.56	0.5	PASS
		5785	15.44	5777.44	5792.88	0.5	PASS
		5825	15.12	5817.44	5832.56	0.5	PASS
11AC40SISO	Ant1	5755	35.04	5737.48	5772.52	0.5	PASS
		5795	35.12	5777.40	5812.52	0.5	PASS
11AC80SISO	Ant1	5775	75.20	5737.40	5812.60	0.5	PASS

Test Graphs B4

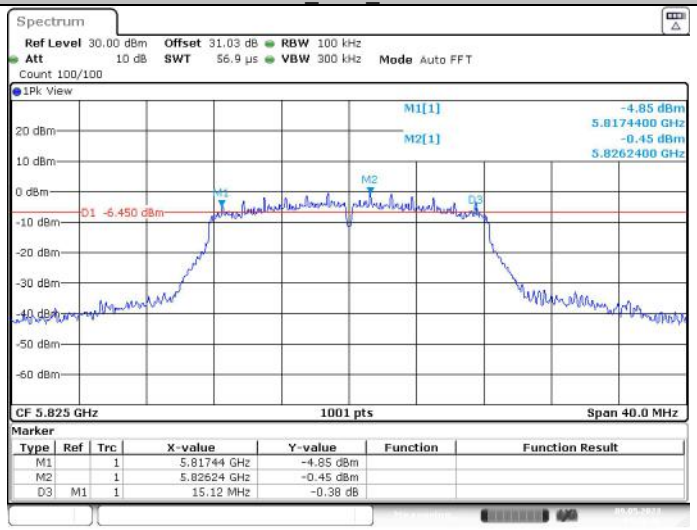
11A_Ant1_5745



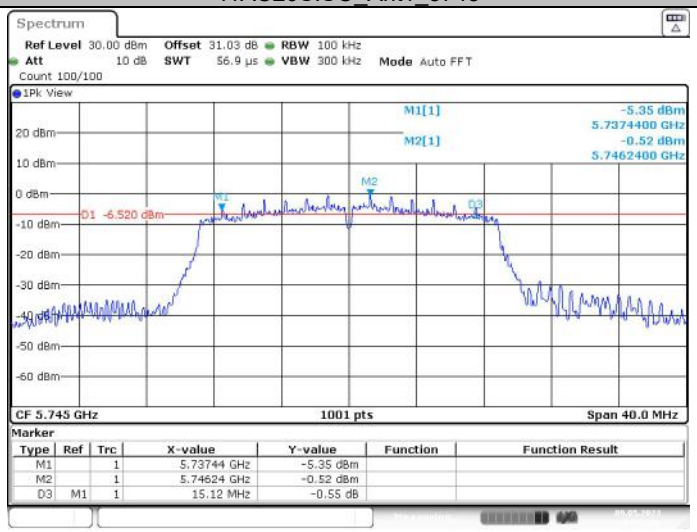
11A_Ant1_5785



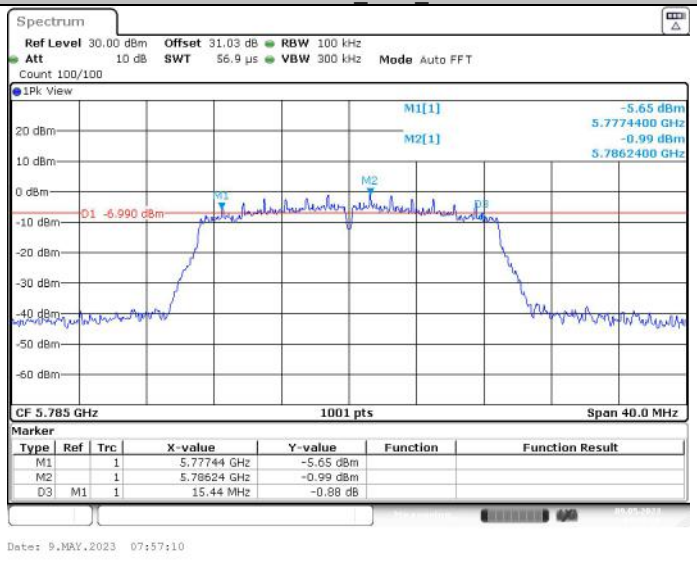
11A_Ant1_5825



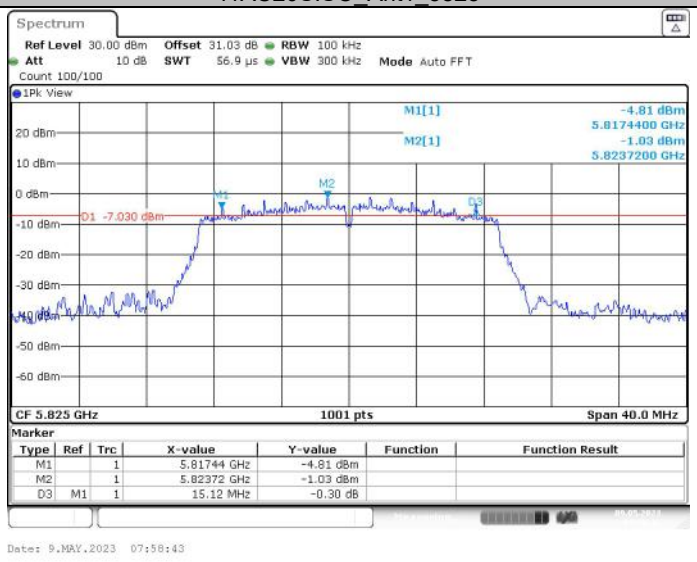
11AC20SISO_Ant1_5745



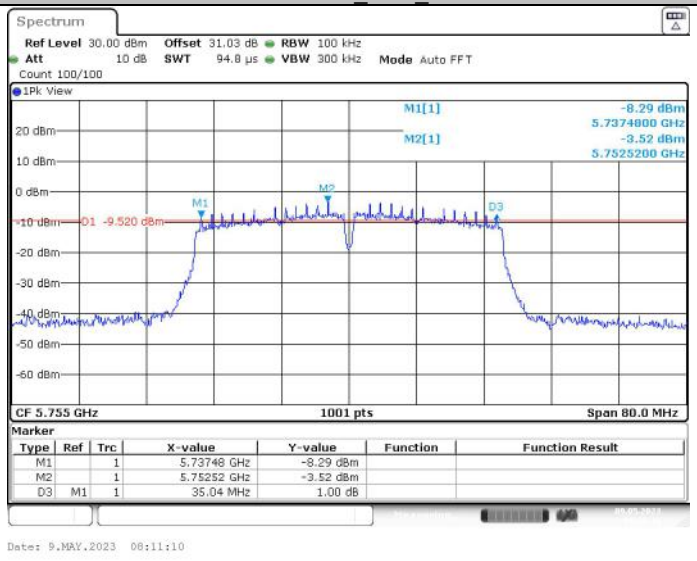
11AC20SISO_Ant1_5785



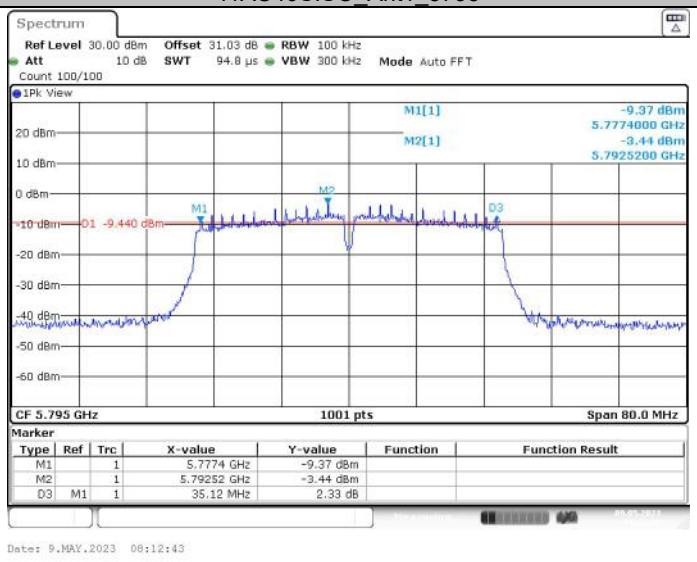
11AC20SISO_Ant1_5825



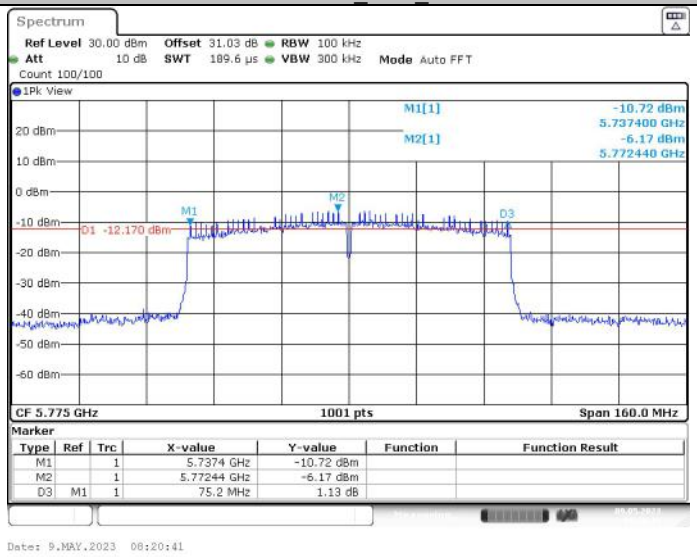
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775

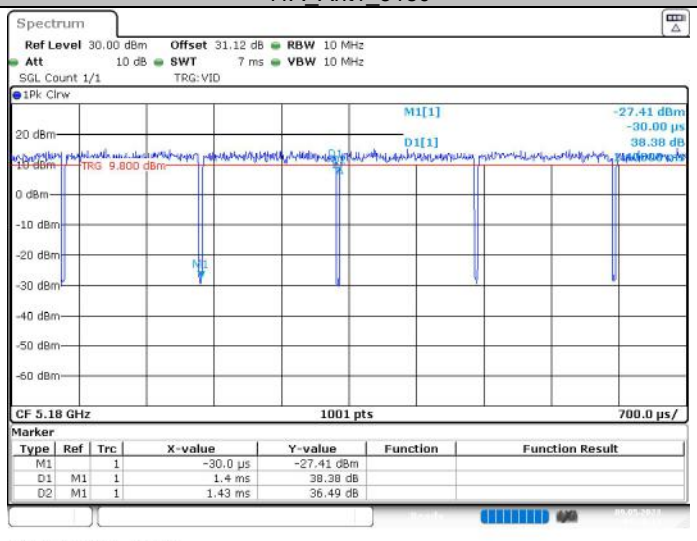


Appendix B: Duty Cycle
Test Result

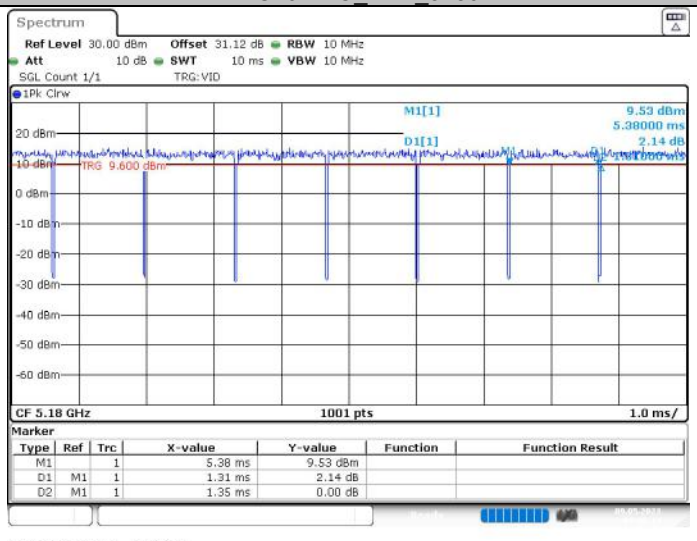
Test Mode	Antenna	Frequency[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Duty Cycle Factor [dB]	1/T[kHz]
11A	Ant1	5180	1.40	1.43	97.90	0.09	0.71
11AC20SISO	Ant1	5180	1.31	1.35	97.04	0.13	0.76
11AC40SISO	Ant1	5190	0.65	0.69	94.20	0.26	1.54
11AC80SISO	Ant1	5210	0.32	0.36	88.89	0.51	3.13

Test Graphs

11A_Ant1_5180



11AC20SISO_Ant1_5180



11AC40SISO_Ant1_5190


11AC80SISO_Ant1_5210


Appendix C: Maximum conducted output power
Test Result

Test Mode	Antenna	Frequency[MHz]	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	11.62	≤23.98	PASS
		5200	**12.12**	≤23.98	PASS
		5240	11.45	≤23.98	PASS
		5260	**11.85**	≤23.98	PASS
		5280	10.99	≤23.98	PASS
		5320	10.73	≤23.98	PASS
		5500	8.60	≤23.98	PASS
		5580	9.73	≤23.98	PASS
		5700	11.21	≤23.98	PASS
		5745	13.02	≤30.00	PASS
		5785	**13.10**	≤30.00	PASS
		5825	13.03	≤30.00	PASS
11AC20SISO	Ant1	5180	11.99	≤23.98	PASS
		5200	11.43	≤23.98	PASS
		5240	11.29	≤23.98	PASS
		5260	11.27	≤23.98	PASS
		5280	10.80	≤23.98	PASS
		5320	10.14	≤23.98	PASS
		5500	8.51	≤23.98	PASS
		5580	9.65	≤23.98	PASS
		5700	10.55	≤23.98	PASS
		5745	12.45	≤30.00	PASS
		5785	12.49	≤30.00	PASS
		5825	12.45	≤30.00	PASS
11AC40SISO	Ant1	5190	12.00	≤23.98	PASS
		5230	11.69	≤23.98	PASS
		5270	11.08	≤23.98	PASS
		5310	10.53	≤23.98	PASS
		5510	8.55	≤23.98	PASS
		5550	9.34	≤23.98	PASS
		5670	**11.32**	≤23.98	PASS
		5755	12.65	≤30.00	PASS
		5795	12.84	≤30.00	PASS
11AC80SISO	Ant1	5210	9.99	≤23.98	PASS
		5290	9.27	≤23.98	PASS
		5530	8.64	≤23.98	PASS
		5610	8.96	≤23.98	PASS
		5775	13.01	≤30.00	PASS

Note：The Duty Cycle Factor is compensated in the result.

Appendix D: Maximum power spectral density
Test Result

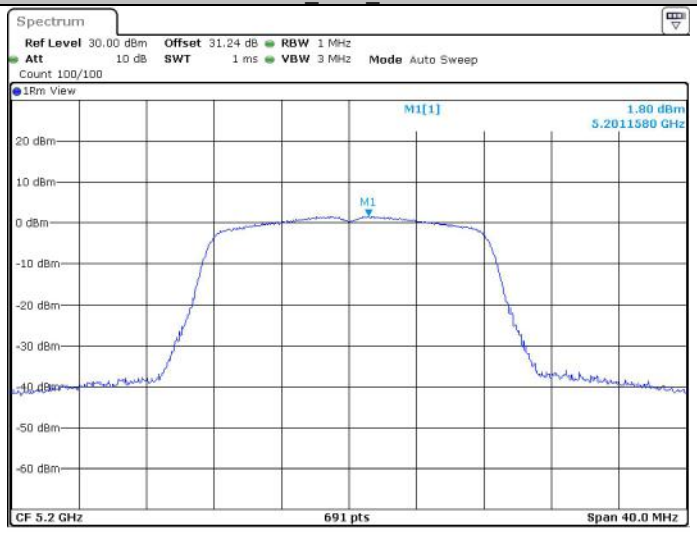
Test Mode	Antenna	Frequency[MHz]	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	1.25	≤11.00	PASS
		5200	1.8	≤11.00	PASS
		5240	1.12	≤11.00	PASS
		5260	1.56	≤11.00	PASS
		5280	0.65	≤11.00	PASS
		5320	0.4	≤11.00	PASS
		5500	-1.59	≤11.00	PASS
		5580	-0.45	≤11.00	PASS
		5700	0.79	≤11.00	PASS
		5745	-0.1	≤30.00	PASS
		5785	-0.18	≤30.00	PASS
		5825	0.11	≤30.00	PASS
11AC20SISO	Ant1	5180	1.62	≤11.00	PASS
		5200	1.04	≤11.00	PASS
		5240	0.85	≤11.00	PASS
		5260	0.73	≤11.00	PASS
		5280	0.43	≤11.00	PASS
		5320	-0.27	≤11.00	PASS
		5500	-2.06	≤11.00	PASS
		5580	-0.97	≤11.00	PASS
		5700	0.07	≤11.00	PASS
		5745	-0.78	≤30.00	PASS
		5785	-0.69	≤30.00	PASS
		5825	-0.88	≤30.00	PASS
11AC40SISO	Ant1	5190	-1.62	≤11.00	PASS
		5230	-1.61	≤11.00	PASS
		5270	-2.22	≤11.00	PASS
		5310	-2.86	≤11.00	PASS
		5510	-4.95	≤11.00	PASS
		5550	-4.06	≤11.00	PASS
		5670	-1.72	≤11.00	PASS
		5755	-3.98	≤30.00	PASS
		5795	-3.63	≤30.00	PASS
11AC80SISO	Ant1	5210	-6.23	≤11.00	PASS
		5290	-7.21	≤11.00	PASS
		5530	-8.96	≤11.00	PASS
		5610	-7.84	≤11.00	PASS
		5775	-6.02	≤30.00	PASS

Note: 1. The Result and Limit Unit is dBm/500 kHz in the band 5.725–5.85GHz.
2. The Duty Cycle Factor is compensated in the graph.

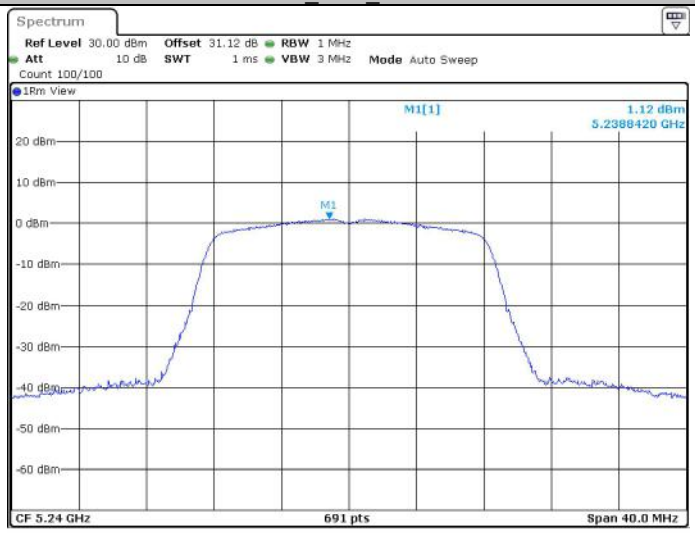
Test Graphs

11A_Ant1_5180

11A_Ant1_5200



11A_Ant1_5240



11A_Ant1_5260

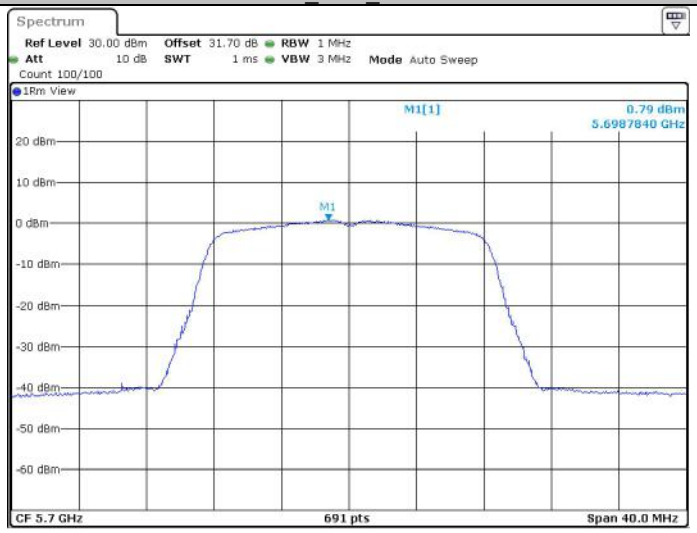
11A_Ant1_5280

11A_Ant1_5320

11A_Ant1_5500

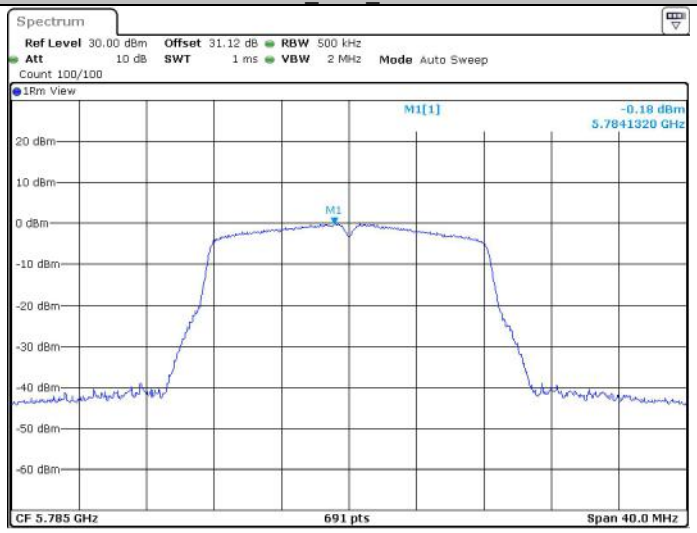
11A_Ant1_5580

11A_Ant1_5700



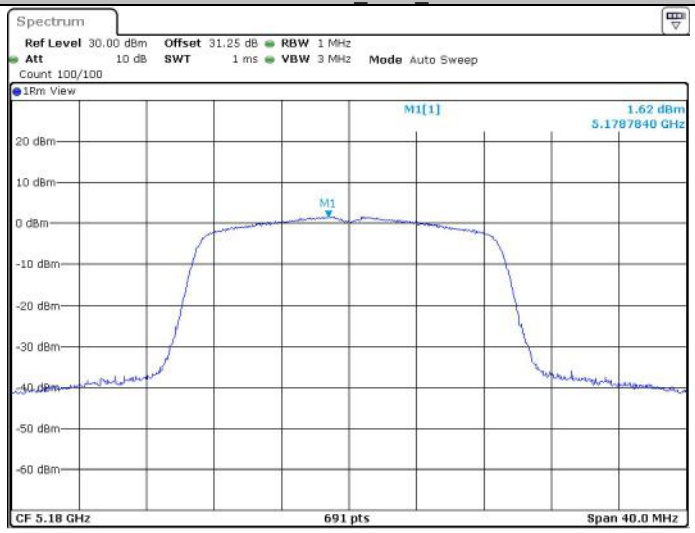
11A_Ant1_5745

11A_Ant1_5785



11A_Ant1_5825

11AC20SISO_Ant1_5180



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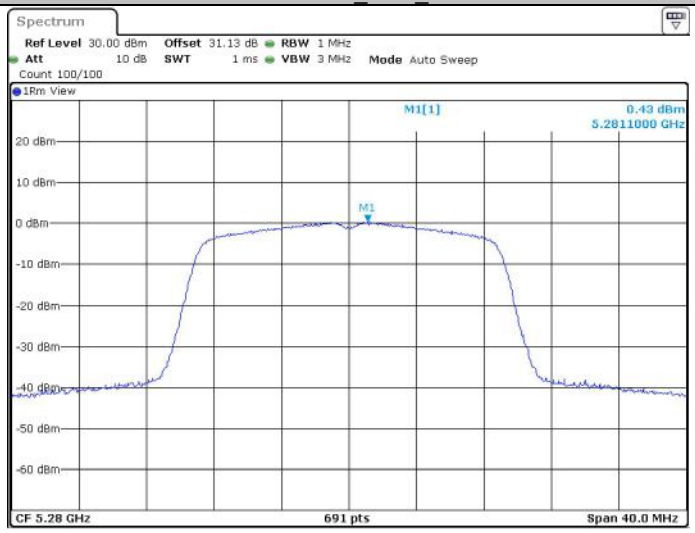
11AC20SISO_Ant1_5240

11AC20SISO_Ant1_5260

11AC20SISO_Ant1_5280



11AC20SISO_Ant1_5320

11AC20SISO_Ant1_5500

11AC20SISO_Ant1_5580

11AC20SISO_Ant1_5700

11AC20SISO_Ant1_5745

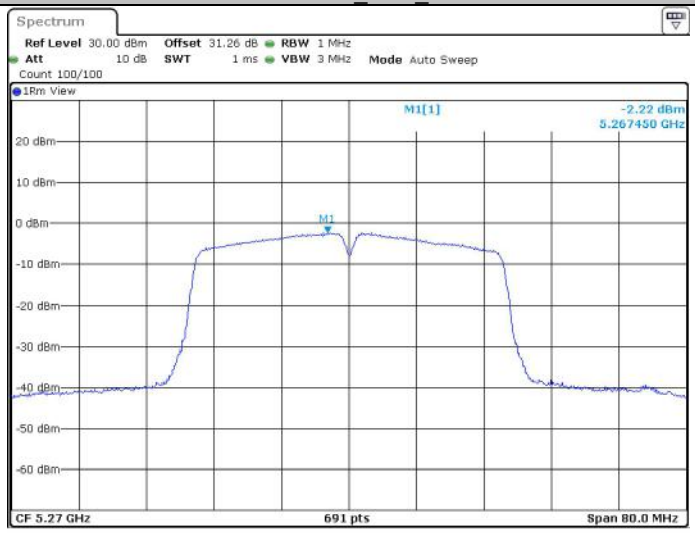
11AC20SISO_Ant1_5785

11AC20SISO_Ant1_5825

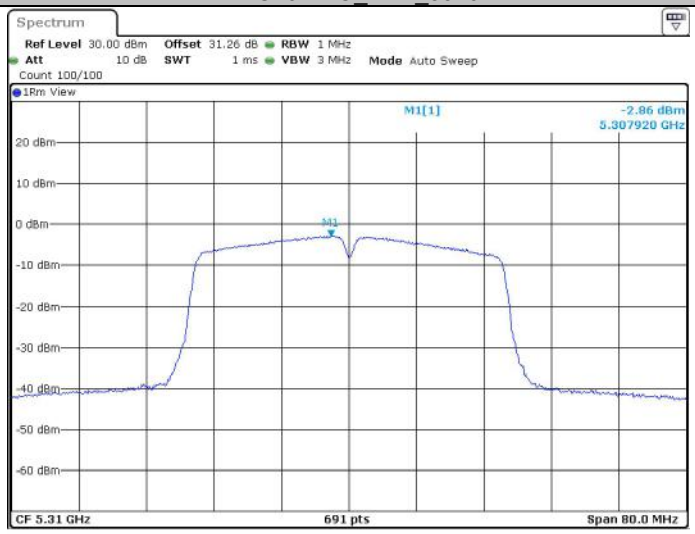

11AC40SISO_Ant1_5190

11AC40SISO_Ant1_5230


11AC40SISO_Ant1_5270

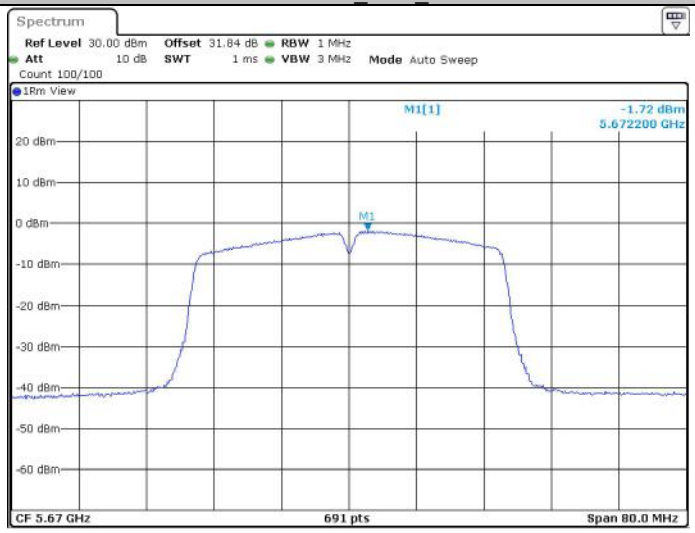


11AC40SISO_Ant1_5310



11AC40SISO_Ant1_5510

11AC40SISO_Ant1_5550


11AC40SISO_Ant1_5670

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11AC40SISO_Ant1_5795


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11AC80SISO_Ant1_5530


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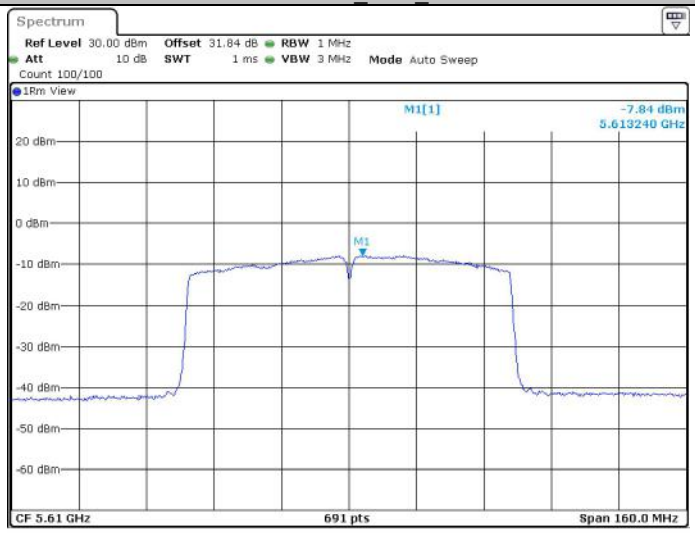
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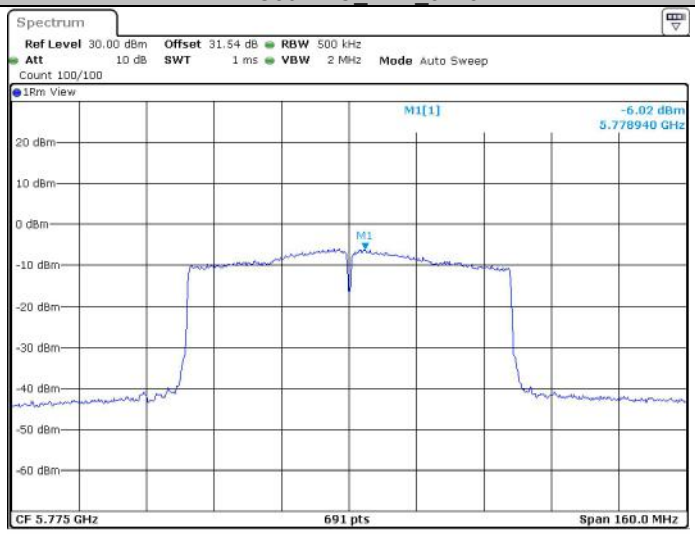

******* END OF REPORT *******