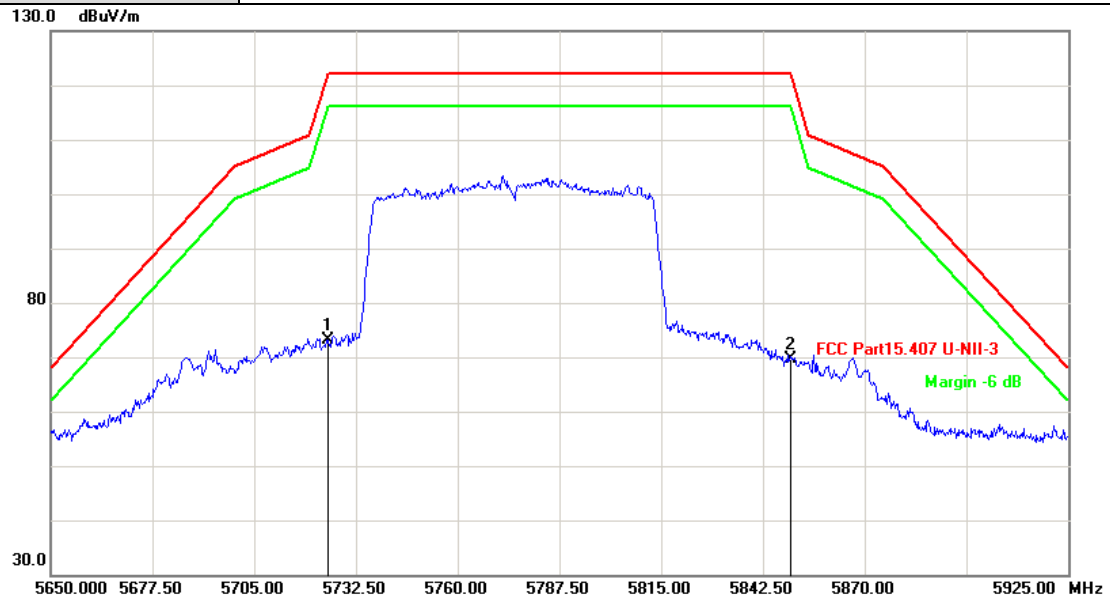




Ant. Pol.	Horizontal
Test Mode:	TX 802.11ac(VHT80) Mode 5775MHz (U-NII-3)
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5725.000	-0.23	73.38	73.15	122.20	-49.05	peak
2	5850.000	0.26	69.37	69.63	122.20	-52.57	peak

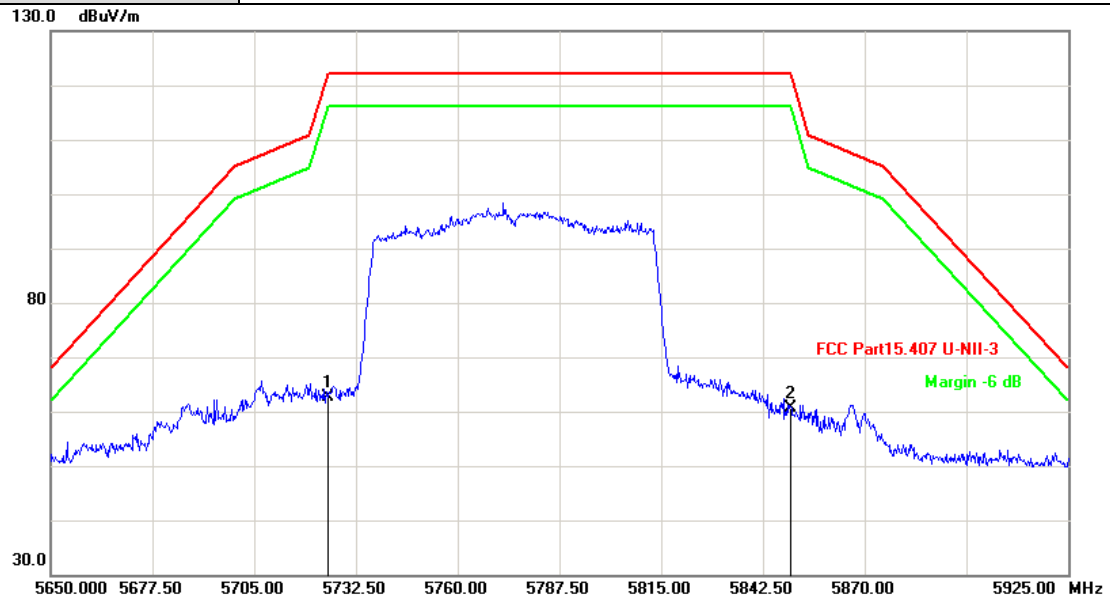
## Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value



Ant. Pol.	Vertical
Test Mode:	TX 802.11ac(VHT80) Mode 5775MHz (U-NII-3)
Remark:	No report for the emission which more than 10 dB below the prescribed limit.



No.	Frequency (MHz)	Factor (dB/m)	Reading (dBuV)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5725.000	-0.23	62.80	62.57	122.20	-59.63	peak
2	5850.000	0.26	60.45	60.71	122.20	-61.49	peak

## Remarks:

1. Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) - Pre-amplifier Factor

2. Margin value = Level - Limit value

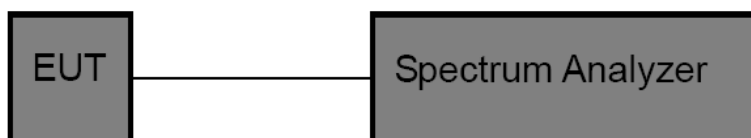


### 3.4. Bandwidth Test

#### Limit

FCC Part 15 Subpart C(15.407)		
Test Item	Limit	Frequency Range (MHz)
26 Bandwidth	N/A	5150~5250
		5250~5350
		5500~5700
6 dB Bandwidth	>500kHz	5725~5850

#### Test Configuration



#### Test Procedure

Please refer to According to KDB789033 D02, for the measurement methods.

#### The setting of the spectrum analyser as below:

26dB Bandwidth Test	
Spectrum Parameters	Setting
Attenuation	Auto
Span	>26 dB Bandwidth
RBW	Approximately 1% of the emission bandwidth
VBW	VBW>RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto



6dB Bandwidth Test	
Spectrum Parameters	Setting
Attenuation	Auto
Span	>6 dB Bandwidth
RBW	100 kHz
VBW	VBW>=3*RBW
Detector	Peak
Trace	Max Hold
Sweep Time	Auto
99% Occupied Bandwidth Test	
Spectrum Parameters	Setting
Attenuation	Auto
RBW	1% to 5% of the OBW
VBW	≥ 3RBW
Detector	Peak
Trace	Max Hold

Note: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

#### **Test Mode**

Please refer to the clause 2.3

#### **Test Results**

Please see the Appendix A1, A2, A3



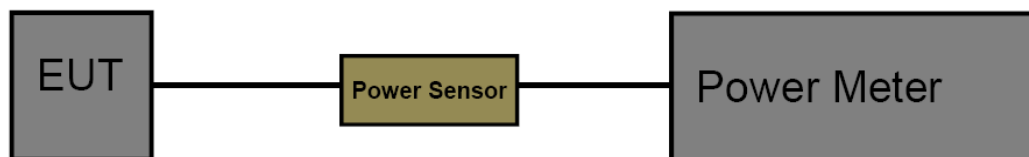


### 3.5. Output Power Test

#### Limit

FCC Part 15 Subpart E (15.407)		
Test Item	Limit	Frequency Range(MHz)
Conducted Output Power	Fixed: 1 Watt (30dBm) Mobile and Portable: 250mW (24dBm)	5150~5250
	250mW (24dBm)	5250~5350
	250mW (24dBm)	5500~5700
	1 Watt (30dBm)	5725~5850

#### Test Configuration



#### Test Procedure

The measurement is according to section 3 of KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

#### Test Mode

Please refer to the clause 2.3

#### Test Result

Please see the Appendix B



### 3.6. Power Spectral Density Test

#### Limit

##### FCC Part 15 Subpart E(15.407)

For the 5.15~5.25GHz band:

- Outdoor AP  
The peak power spectral density (PSD) shall not exceed the lesser of 17dBm/MHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 17 - (G_{TX} - 6)$ .
- Indoor AP  
The peak power spectral density (PSD) shall not exceed the lesser of 17dBm/MHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 17 - (G_{TX} - 6)$ .
- Point-to-point AP  
The peak power spectral density (PSD) shall not exceed the lesser of 17dBm/MHz.  
If  $G_{TX} > 23\text{dBi}$ , then  $\text{PSD} = 17 - (G_{TX} - 23)$ .
- Client devices  
The peak power spectral density (PSD) shall not exceed the lesser of 11dBm/MHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 11 - (G_{TX} - 6)$ .

For the 5.25~5.35GHz band:

The peak power spectral density (PSD) shall not exceed the lesser of 11dBm/MHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 11 - (G_{TX} - 6)$ .

For the 5.47~5.725GHz band:

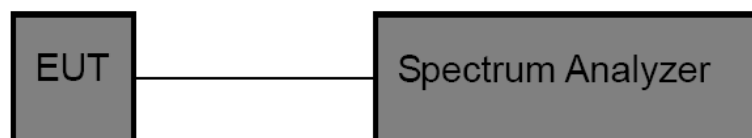
The peak power spectral density (PSD) shall not exceed the lesser of 11dBm/MHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 11 - (G_{TX} - 6)$ .

For the 5.725~5.85GHz band:

- Point-to-multipoint systems (P2M)  
The peak power spectral density (PSD) shall not exceed the lesser of 30dBm/500kHz.  
If  $G_{TX} > 6\text{dBi}$ , then  $\text{PSD} = 30 - (G_{TX} - 6)$ .
- Point-to-point systems (P2P)  
The peak power spectral density (PSD) shall not exceed the lesser of 30dBm/500kHz.

Note:  $G_{TX}$ : EUT Antenna gain.

#### Test Configuration



#### Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above. The measurement is according to KDB 789033 D02 General UNII Test Procedures New Rules V02r01.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyzer center frequency to transmitting frequency.
- (3) Set the span to encompass the entire emissions bandwidth (EBW)(alternatively, the entire 99% OBW) of the signal.
- (4) RBW=1MHz for devices operating in the bands 5.15-5.25 GHz, 5.25-5.35 GHz, and 5.47-5.725 GHz  
RBW=500kHz for devices operating in the band 5.725-5.85 GHz



- (5) Set the VBW to:  $\geq 3$  RBW
  - (6) Detector: AVG
  - (7) Trace: Max Hold and View
  - (7) Sweep time: auto
  - (8) Trace average at least 100 traces in power averaging.
  - (9) User the peak marker function to determine the maximum amplitude level within the RBW. Apply correction to the result if different RBW is used.
- NOTE: The EUT was set to continuously transmitting in each mode and low, Middle and high channel for the test.

### **Test Mode**

Please refer to the clause 2.3

### **Test Result**

Please see the Appendix C

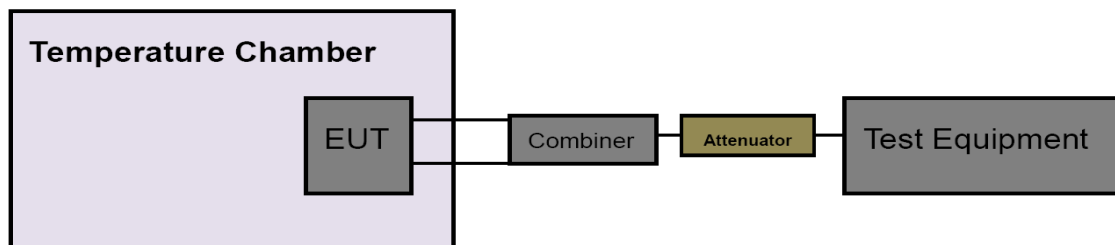


### 3.7. Frequency Stability Measurement

#### Limit

FCC Part 15 Subpart C(15.407)		
Test Item	Limit	Frequency Range(MHz)
Peak Excursion Measurement	Specified in the user's manual, the transmitter center frequency tolerance shall be $\pm 20$ ppm maximum for the 5 GHz band (IEEE 802.11n specification)	5150~5250
		5250~5350
		5500~5700
		5725~5850

#### Test Configuration



#### Test Procedure

The EUT was directly connected to the Spectrum Analyzer and antenna output port as show in the block diagram above.

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Set analyzer center frequency to transmitting frequency.
- (3) Set the span to encompass the entire emissions bandwidth (EBW) of the signal.
- (4) Set the RBW to: 10 kHz, VBW=10 kHz with peak detector and maxhold settings.
- (5) The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
- (6) Extreme temperature is -30°C~50°C

NOTE: The EUT was set to continuously transmitting in continuously un-modulation transmitting mode.

#### Test Mode

Please refer to the clause 2.3

#### Test Result

Please see the Appendix D





### 3.8. Antenna Requirement

#### Standard Requirement

##### **FCC CFR Title 47 Part 15 Subpart C Section 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, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### Test Result

The directional gain of the antenna less than 6dBi, please refer to the EUT internal photographs antenna photo.



### 3.9. Dynamic Frequency Selection(DFS)

#### Requirement

Table 1: Applicability of DFS Requirements Prior to Use of a Channel

Requirement	Operational Mode		
	Master	Client Without Radar Detection	Client With Radar Detection
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
U-NII Detection Bandwidth	Yes	Not required	Yes

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode	
	Master Device or Client with Radar Detection	Client Without Radar Detection
DFS Detection Threshold	Yes	Not required
Channel Closing Transmission Time	Yes	Yes
Channel Move Time	Yes	Yes
U-NII Detection Bandwidth	Yes	Not required

Additional requirements for devices with multiple bandwidth modes	Master Device or Client with Radar Detection	Client Without Radar Detection
U-NII Detection Bandwidth and Statistical Performance Check	All BW modes must be tested	Not required
Channel Move Time and Channel Closing Transmission Time	Test using widest BW mode available	Test using the widest BW mode available for the link
All other tests	Any single BW mode	Not required

Note: Frequencies selected for statistical performance check (Section 7.8.4) should include several frequencies within the radar detection bandwidth and frequencies near the edge of the radar detection bandwidth. For 802.11 devices it is suggested to select frequencies in each of the bonded 20 MHz channels and the channel center frequency.

#### LIMIT

##### 1. DFS Detection Thresholds

Table 3: DFS Detection Thresholds for Master Devices and Client Devices With Radar Detection

Maximum Transmit Power	Value (See Notes 1, 2, and 3)
EIRP $\geq$ 200 milliwatt	-64 dBm
EIRP $<$ 200 milliwatt and power spectral density $<$ 10 dBm/MHz	-62 dBm
EIRP $<$ 200 milliwatt that do not meet the power spectral density requirement	-64 dBm



Note 1: This is the level at the input of the receiver assuming a 0dBi receive antenna.

Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Note3: EIRP is based on the highest antenna gain. For MIMO devices refer to KDB Publication 662911 D01.

## 2. DFS Response Requirements

Table 4: DFS Response Requirement Values

Parameter	Value
Non-occupancy period	Minimum 30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds See Note 1.
Channel Closing Transmission Time	200 milliseconds + an aggregate of 60 milliseconds over remaining 10 second period. See Notes 1 and 2.
U-NII Detection Bandwidth	Minimum 100% of the U-NII 99% transmission power bandwidth. See Note 3.
<p>Note 1: Channel Move Time and the Channel Closing Transmission Time should be performed with Radar Type 0. The measurement timing begins at the end of the Radar Type 0 burst.</p> <p>Note 2: The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required facilitating a Channel move (an aggregate of 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.</p> <p>Note 3: During the U-NII Detection Bandwidth detection test, radar type 0 should be used. For each frequency step the minimum percentage of detection is 90 percent. Measurements are performed with no data traffic.</p>	

## RADAR TEST WAVEFORMS

This section provides the parameters for required test waveforms, minimum percentage of successful detections, and the minimum number of trials that must be used for determining DFS conformance. Step intervals of 0.1 microsecond for Pulse Width, 1 microsecond for PRI, 1 MHz for chirp width and 1 for the number of pulses will be utilized for the random determination of specific test waveforms.

Table 5 Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (μsec)	PRI (μsec)	Number of Pulses	Minimum Percentage of Successful Detection	Minimum Number of Trials
0	1	1428	18	See Note 1	See Note 1
1	1	Test A: 15 unique PRI values randomly selected from the list of 23 PRI values in Table 5a	$\text{Roundup} \left\{ \left( \frac{1}{360} \right), \left( \frac{19 \cdot 10^6}{\text{PRI}_{\mu\text{sec}}} \right) \right\}$	60%	30
		Test B: 15 unique PRI values randomly selected within the range of 518-3066 μsec, with a minimum increment of 1 μsec, excluding PRI values selected in Test A			

CTC Laboratories, Inc.

1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

Tel.: (86)755-27521059

Fax: (86)755-27521011

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2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120
Note 1: Short Pulse Radar Type 0 should be used for the detection bandwidth test, channel move time, and channel closing time tests.					

A minimum of 30 unique waveforms are required for each of the Short Pulse Radar Types 2 through 4. If more than 30 waveforms are used for Short Pulse Radar Types 2 through 4, then each additional waveform must also be unique and not repeated from the previous waveforms. If more than 30 waveforms are used for Short Pulse Radar Type 1, then each additional waveform is generated with Test B and must also be unique and not repeated from the previous waveforms in Tests A or B.

For example if in Short Pulse Radar Type 1 Test B a PRI of 3066  $\mu$ sec is selected, the number of pulses would be

$$\left\lceil \left\{ \left( \frac{1}{360} \right) \cdot \left( \frac{19 \cdot 10^6}{3066} \right) \right\} \right\rceil$$

Round up = Round up {17.2} = 18.

Table 5a - Pulse Repetition Intervals Values for Test A

Pulse Repetition Frequency Number	Pulse Repetition Frequency (Pulses Per Second)	Pulse Repetition Interval (Microseconds)
1	1930.5	518
2	1858.7	538
3	1792.1	558
4	1730.1	578
5	1672.2	598
6	1618.1	618
7	1567.4	638
8	1519.8	658
9	1474.9	678
10	1432.7	698
11	1392.8	718
12	1355	738
13	1319.3	758
14	1285.3	778
15	1253.1	798
16	1222.5	818
17	1193.3	838
18	1165.6	858
19	1139	878
20	1113.6	898
21	1089.3	918
22	1066.1	938
23	326.2	3066

Table 6 – Long Pulse Radar Test Waveform



Radar Type	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Number of Pulses per Burst	Number of Bursts	Minimum Percentage of Successful Detection	Minimum Number of Trials
5	50-100	5-20	1000-2000	1-3	8-20	80%	30

The parameters for this waveforms are randomly chosen. Thirty unique waveforms are required for the Long Pulse Radar Type waveforms. If more than 30 waveforms are used for the Long Pulse Radar Type wave forms, then each additional waveform must also be unique and not repeated from the previous waveforms.

Table 7 – Frequency Hopping Radar Test Waveform

Radar Type	Pulse Width (μsec)	PRI (μsec)	Pulses per Hop	Hopping Rate (kHz)	Hopping Sequence Length (msec)	Minimum Percentage of Successful Detection	Minimum Number of Trials
6	1	333	9	0.333	300	70%	30

For the Frequency Hopping Radar Type, the same Burst parameters are used for each wave form. The hopping sequence is different for each wave form and a 100-length segment is selected from the hopping sequence defined by the following algorithm:

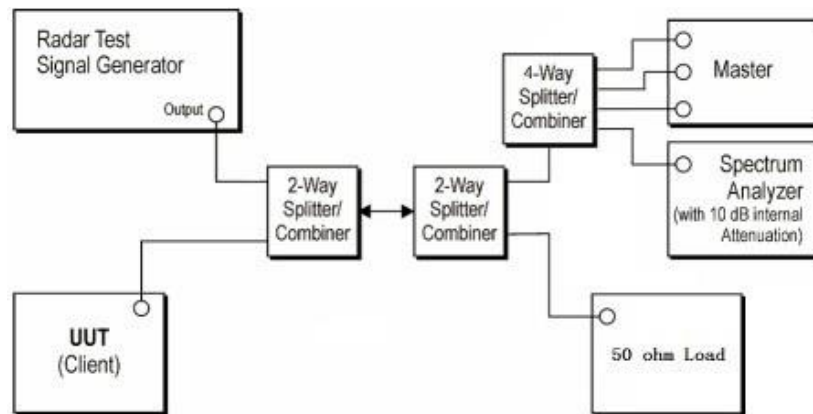
The first frequency in a hopping sequence is selected randomly from the group of 475 integer frequencies from 5250–5724MHz. Next, the frequency that was just chosen is removed from the group and a frequency is randomly selected from the remaining 474 frequencies in the group. This process continues until all 475 frequencies are chosen for the set. For selection of a random frequency, the frequencies remaining within the group are always treated as equally likely.

### **Calibration of Radar Waveform**

#### **Radar Waveform Calibration Procedure**

- 1) A 50 ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to place of the master
- 2) The interference Radar Detection Threshold Level is  $-62\text{dBm} + 0\text{dBi} + 1\text{dB} = -61\text{dBm}$  that had been taken into account the output power range and antenna gain.
- 3) The following equipment setup was used to calibrate the conducted radar waveform. A vector signal generator was utilized to establish the test signal level for radar type 0. During this process there were no transmissions by either the master or client device. The spectrum analyzer was switched to the zero spans (time domain) at the frequency of the radar waveform generator. Peak detection was used. The spectrum analyzer resolution bandwidth (RBW) and video bandwidth (VBW) were set to 3 MHz. The spectrum analyzer had offset  $-1.0\text{dB}$  to compensate RF cable loss  $1.0\text{dB}$ .
- 4) The vector signal generator amplitude was set so that the power level measured at the spectrum analyzer was  $-62\text{dBm} + 0\text{dBi} + 1\text{dB} = -61\text{dBm}$ . Capture the spectrum analyzer plots on short pulse radar waveform.

### Conducted Calibration Setup

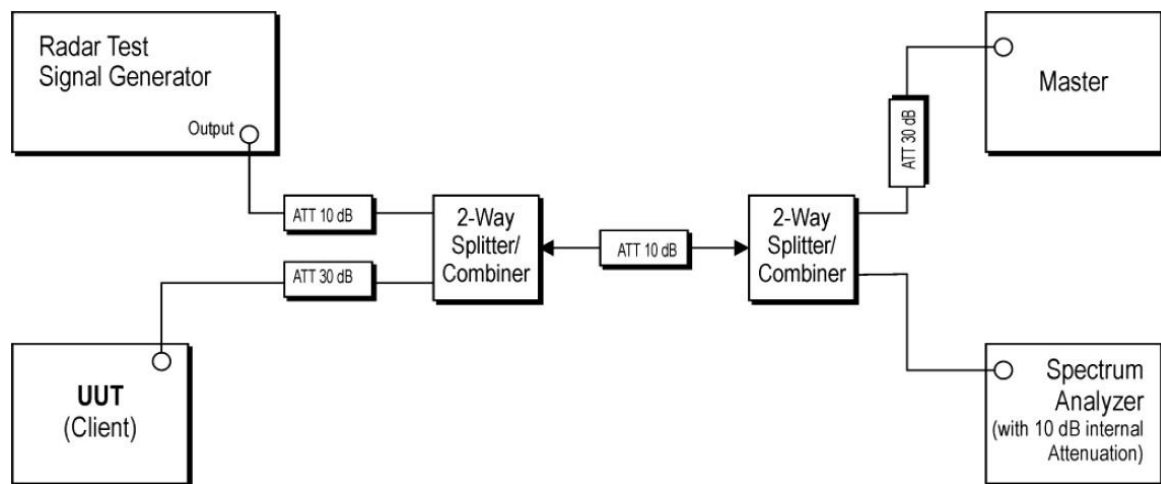


## Radar Waveform Calibration Result

Not Applicable

### Test Configuration

## Setup for Client with injection at the Master



## Test Procedure

1. The radar pulse generator is setup to provide a pulse at a frequency that the master and client are operating. A type 0 radar pulse with a 1us pulse width and a 1428us PRI is used for the testing.
2. The vector signal generator is adjusted to provide the radar burst (18 pulses) at the level of approximately -61dBm at the antenna port of the master device
3. A trigger is provided from the pulse generator to the DFS monitoring system in order to capture the traffic and the occurrence of the radar pulse.
4. EUT will associate with the master at channel. The file "iperf.exe" specified by the FCC is streamed from the PC 2 through the master and the client device to the PC 1 and played in full motion video using Media Player Classic Ver. 6.4.8.6 in order to properly load the network for the entire period of the test.
5. When radar burst with a level equal to the DFS Detection Threshold +1dB is generated on the operating channel of the U-NII device. At time T0 the radar waveform generator sends a burst of pulse of the radar waveform at Detection Threshold +1dB.
6. Observe the transmissions of the EUT at the end of the radar Burst on the Operating Channel Measure and record the transmissions from the UUT during the observation time (Channel Move Time). One 15 seconds plot is reported for the Short Pulse Radar Type 0. The plot for the Short Pulse Radar Types start



at the end of the radar burst. The Channel Move Time will be calculated based on the zoom in 600ms plot of the Short Pulse Radar Type

7. Measurement of the aggregate duration of the Channel Closed Transmission Time method. With the spectrum analyzer set to zero span tuned to the center frequency of the EUT operating channel at the radar simulated frequency, peak detection, and max hold, the dwell time per bin is given by:  $D_{\text{well}} (0.3\text{ms}) = S (12000\text{ms}) / B (4000)$ ; where  $D_{\text{well}}$  is the dwell time per spectrum analyzer sampling bin,  $S$  is sweep time and  $B$  is the number of spectrum analyzer sampling bins. An upper bound of the aggregate duration of the intermittent control signals of Channel Closing Transmission Time is calculated by:  $C (\text{ms}) = N \times D_{\text{well}} (0.3\text{ms})$ ; where  $C$  is the Closing Time,  $N$  is the number of spectrum analyzer sampling bins (intermittent control signals) showing a U-NII transmission and  $D_{\text{well}}$  is the dwell time per bin.
8. Measurement the EUT for more than 30 minutes following the channel move time to verify that no transmission or beacons occur on this channel.

### **Test Mode**

Please refer to the clause 2.3

### **Test Results**

☐ Passed

☒ Not Applicable





## Appendix A1: Emission Bandwidth

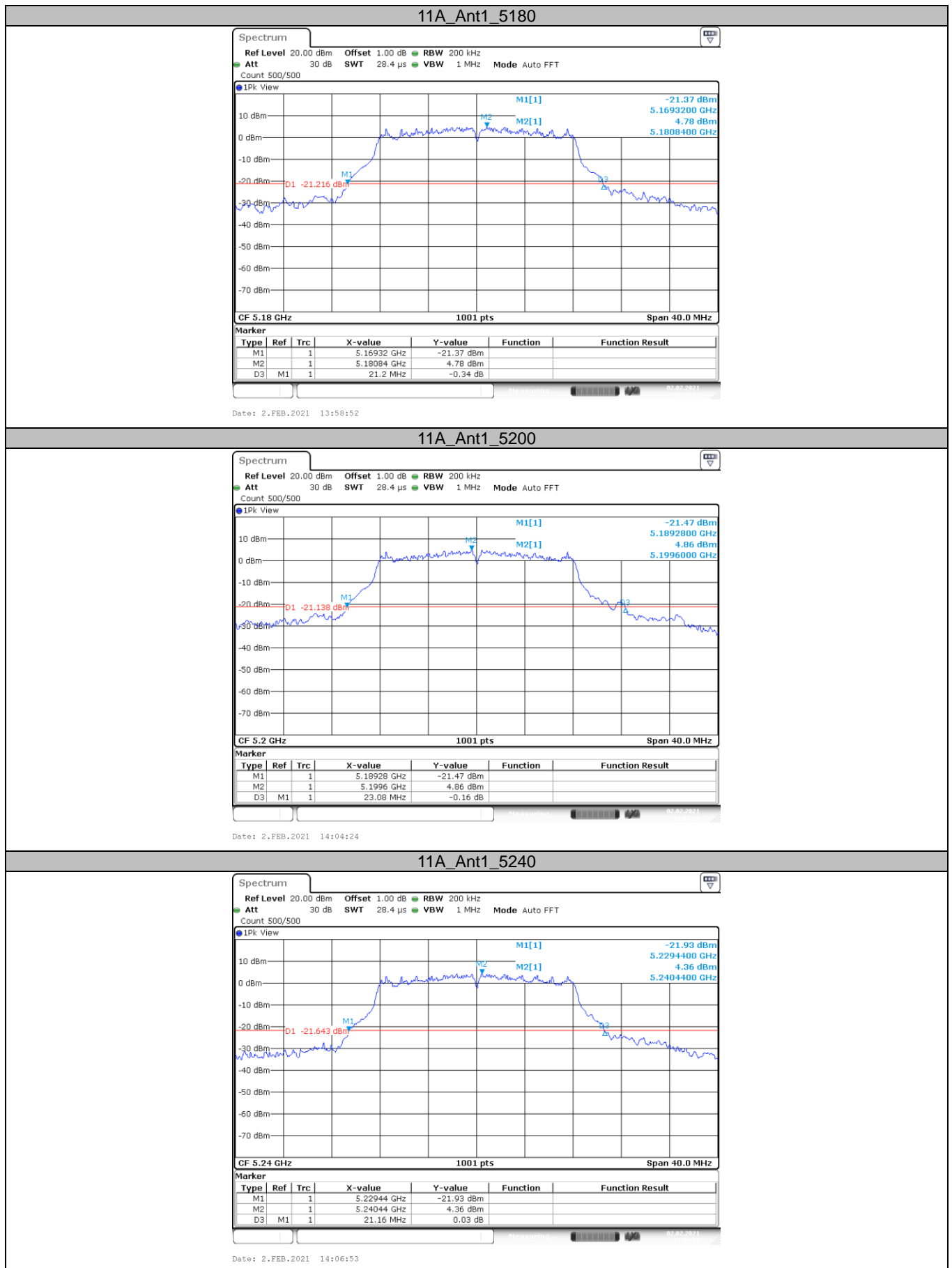
### Test Result

TestMode	Antenna	Channel	26db EBW [MHz]	FL[MHz]	FH[MHz]	Verdict
11A	Ant1	5180	21.200	5169.320	5190.520	PASS
		5200	23.080	5189.280	5212.360	PASS
		5240	21.160	5229.440	5250.600	PASS
		5745	22.080	5733.680	5755.760	PASS
		5785	21.840	5773.720	5795.560	PASS
		5825	21.840	5813.720	5835.560	PASS
11N20SISO	Ant1	5180	21.560	5169.360	5190.920	PASS
		5200	21.440	5189.320	5210.760	PASS
		5240	22.080	5229.200	5251.280	PASS
		5745	21.480	5734.400	5755.880	PASS
		5785	21.600	5774.200	5795.800	PASS
		5825	21.560	5814.160	5835.720	PASS
11N40SISO	Ant1	5190	39.920	5170.000	5209.920	PASS
		5230	40.000	5210.080	5250.080	PASS
		5755	40.080	5735.000	5775.080	PASS
		5795	39.920	5775.080	5815.000	PASS
11AC20SISO	Ant1	5180	21.360	5169.360	5190.720	PASS
		5200	21.400	5189.320	5210.720	PASS
		5240	21.400	5229.360	5250.760	PASS
		5745	21.520	5734.240	5755.760	PASS
		5785	21.520	5774.160	5795.680	PASS
		5825	21.400	5814.320	5835.720	PASS
11AC40SISO	Ant1	5190	40.320	5169.600	5209.920	PASS
		5230	40.480	5209.600	5250.080	PASS
		5755	43.440	5734.760	5778.200	PASS
		5795	40.480	5774.520	5815.000	PASS
11AC80SISO	Ant1	5210	80.800	5170.160	5250.960	PASS
		5775	80.160	5735.000	5815.160	PASS





## Test Graphs



CTC Laboratories, Inc.

1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

Tel.: (86)755-27521059

Fax: (86)755-27521011

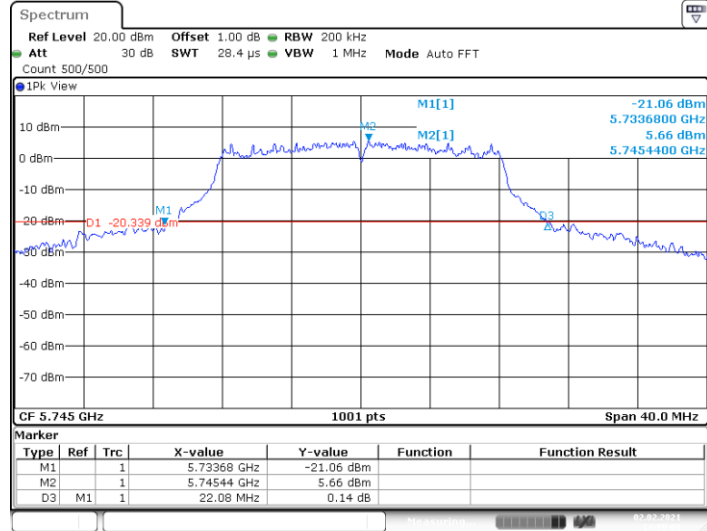
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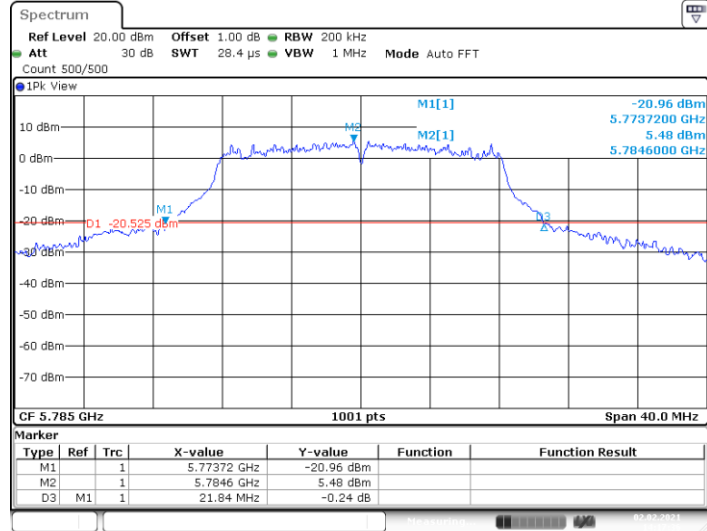


## 11A\_Ant1\_5745



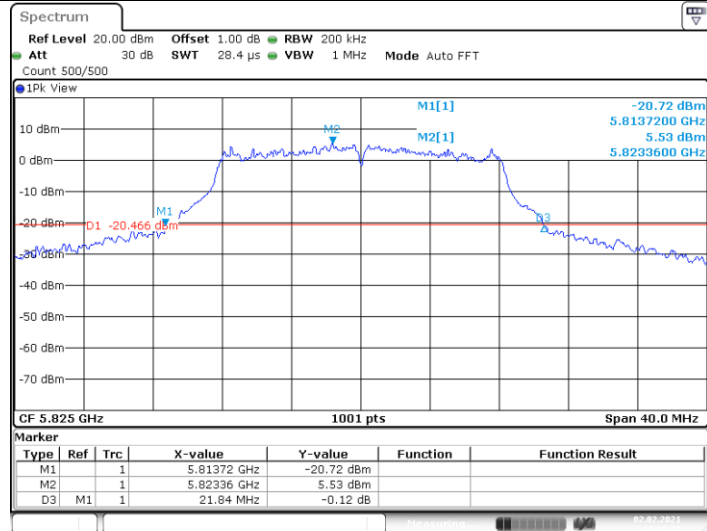
Date: 2.FEB.2021 14:08:59

## 11A\_Ant1\_5785



Date: 2.FEB.2021 14:17:36

## 11A\_Ant1\_5825



Date: 2.FEB.2021 14:19:33

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Tel.: (86)755-27521059

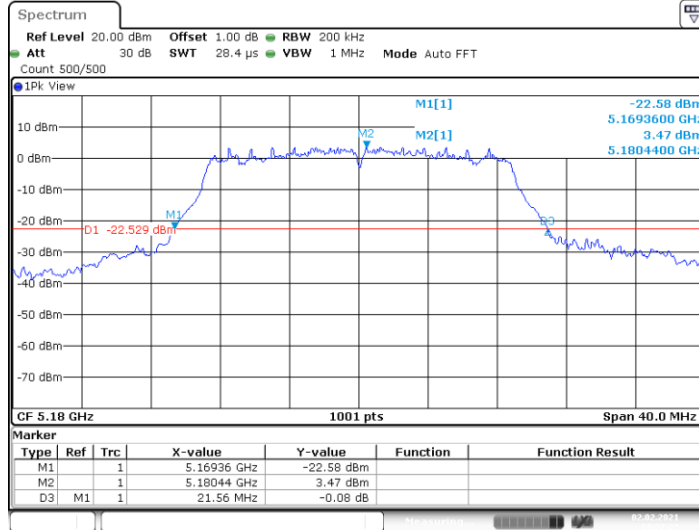
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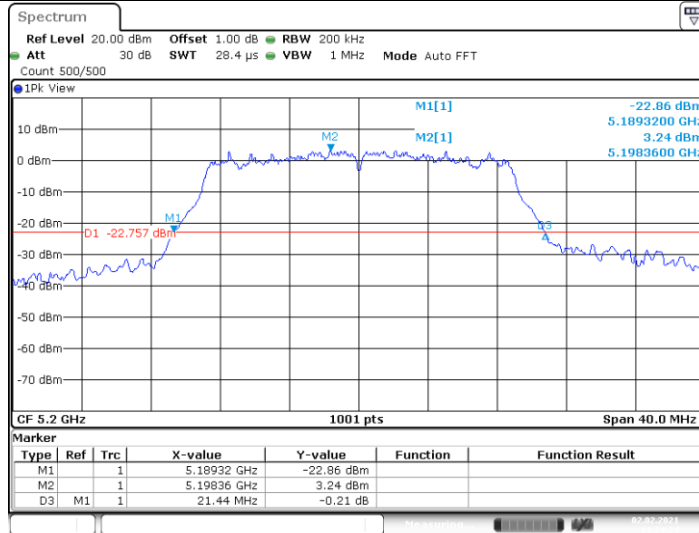
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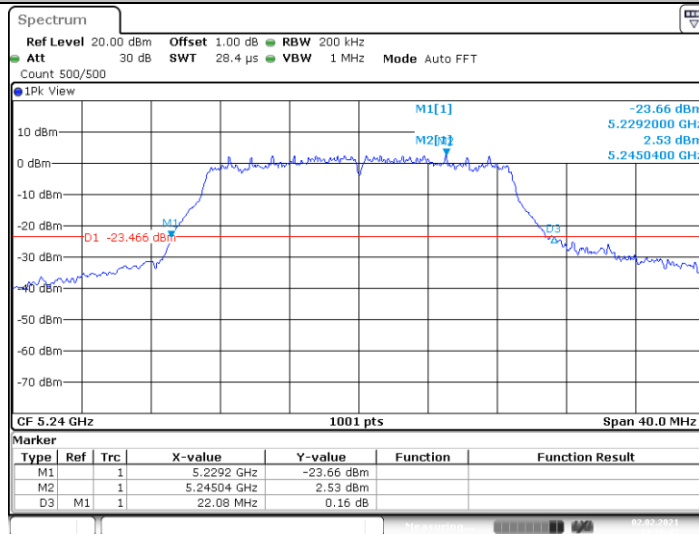
## 11N20SISO\_Ant1\_5180



## 11N20SISO\_Ant1\_5200



## 11N20SISO\_Ant1\_5240



CTC Laboratories, Inc.

1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

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Fax: (86)755-27521011

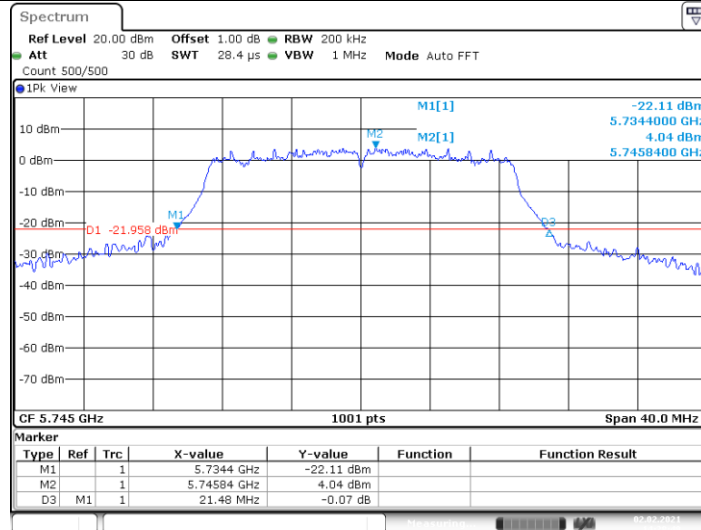
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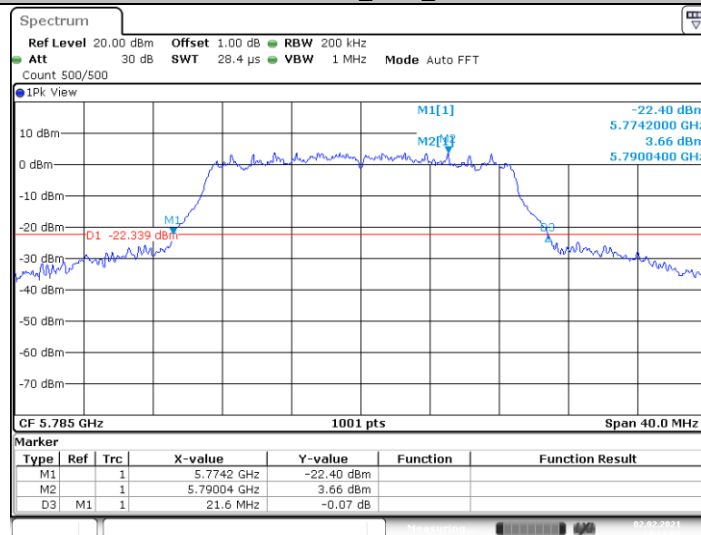
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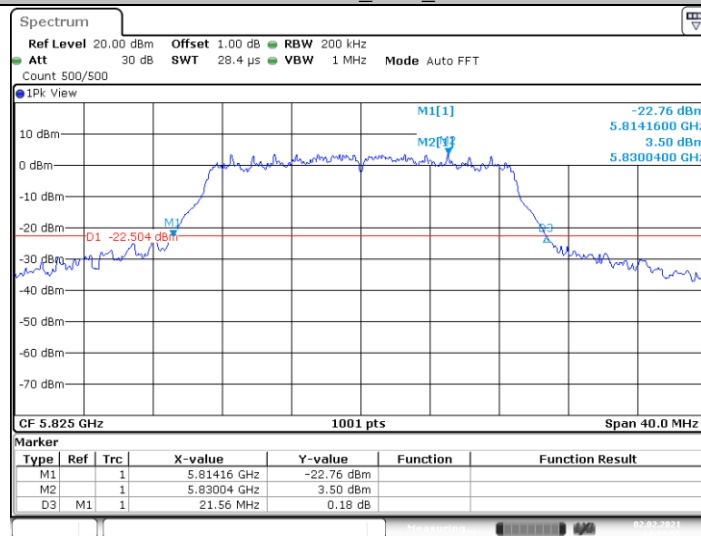
## 11N20SISO\_Ant1\_5745



## 11N20SISO\_Ant1\_5785



## 11N20SISO\_Ant1\_5825



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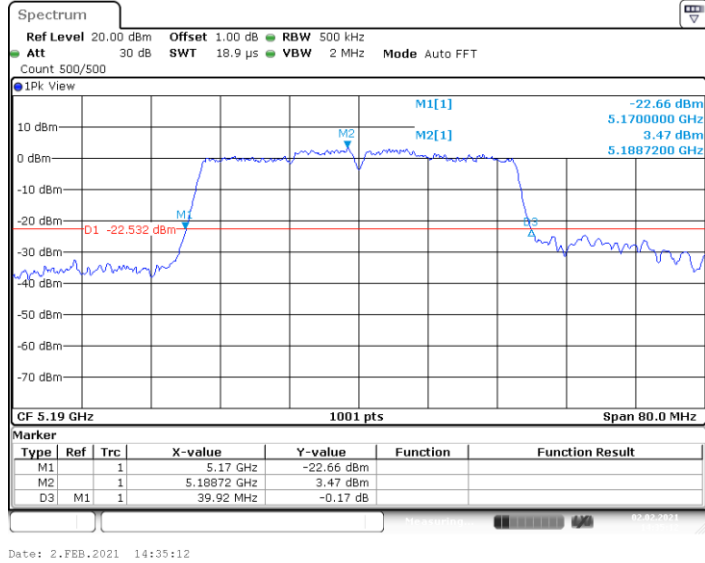
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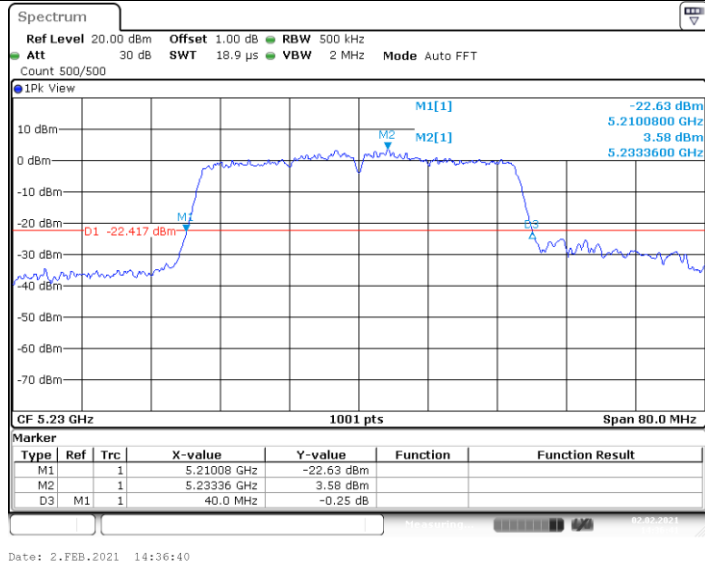
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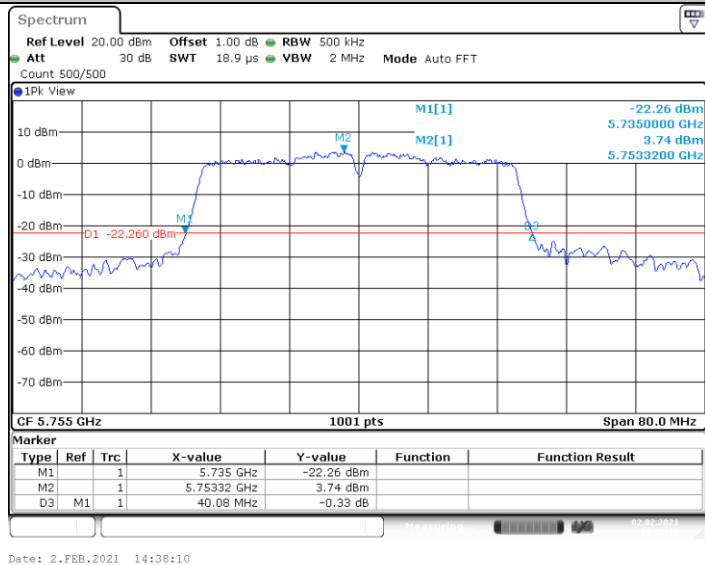
## 11N40SISO\_Ant1\_5190



## 11N40SISO\_Ant1\_5230



## 11N40SISO\_Ant1\_5755



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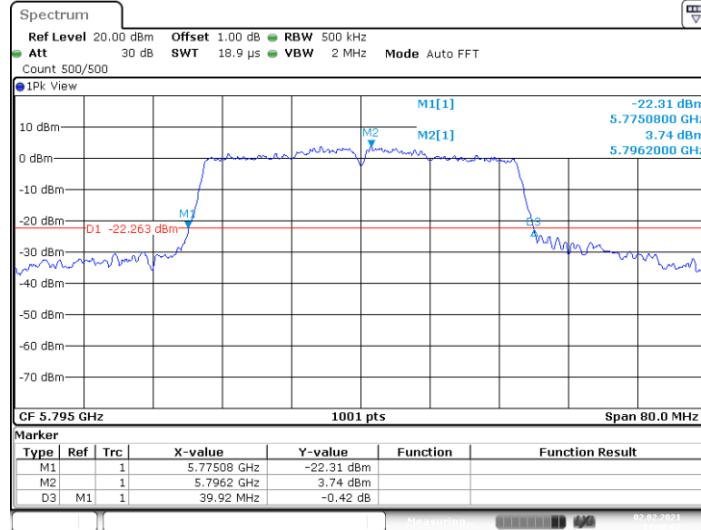
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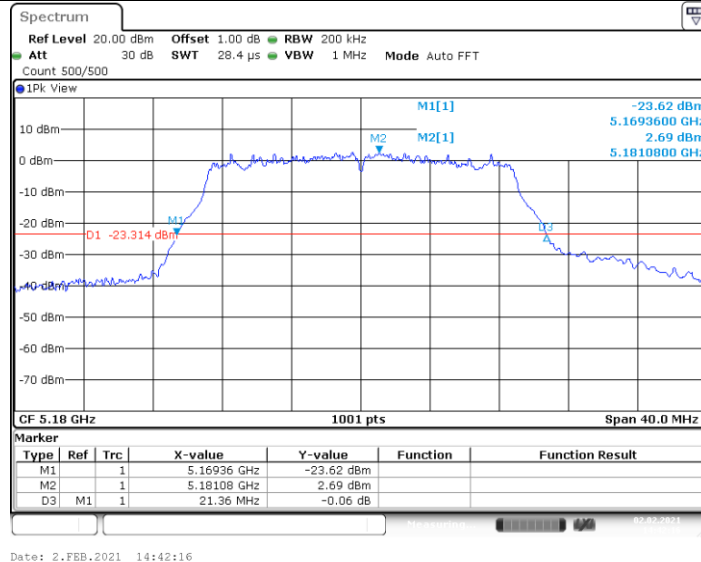
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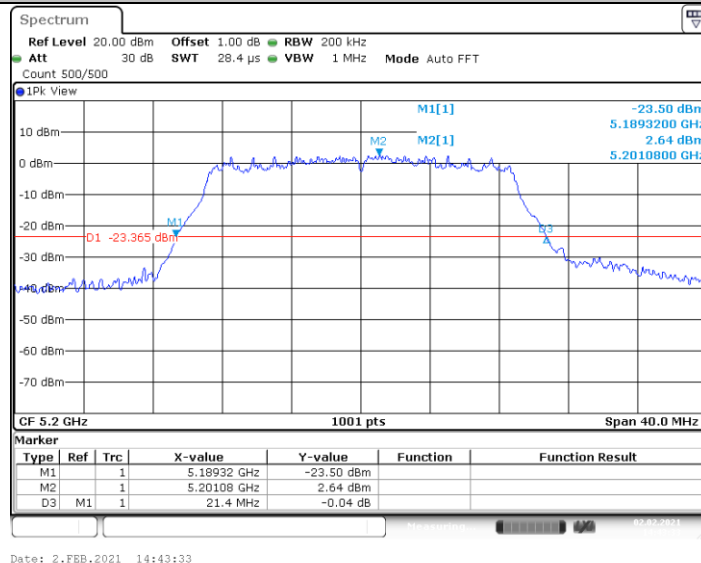
## 11N40SISO\_Ant1\_5795



## 11AC20SISO\_Ant1\_5180



## 11AC20SISO\_Ant1\_5200



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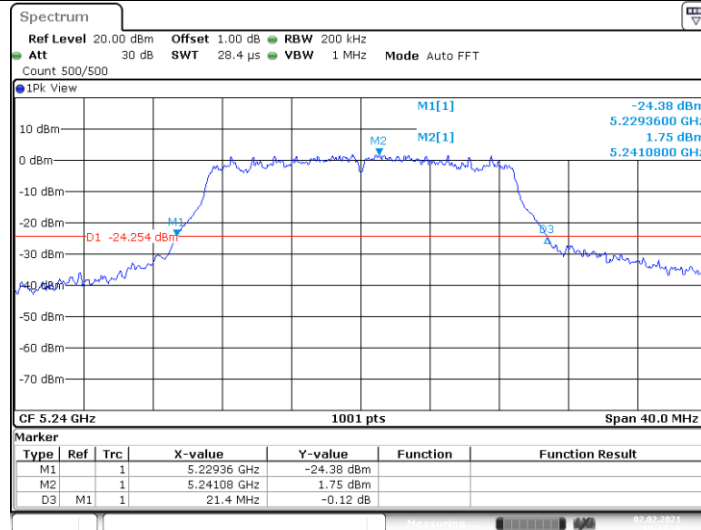
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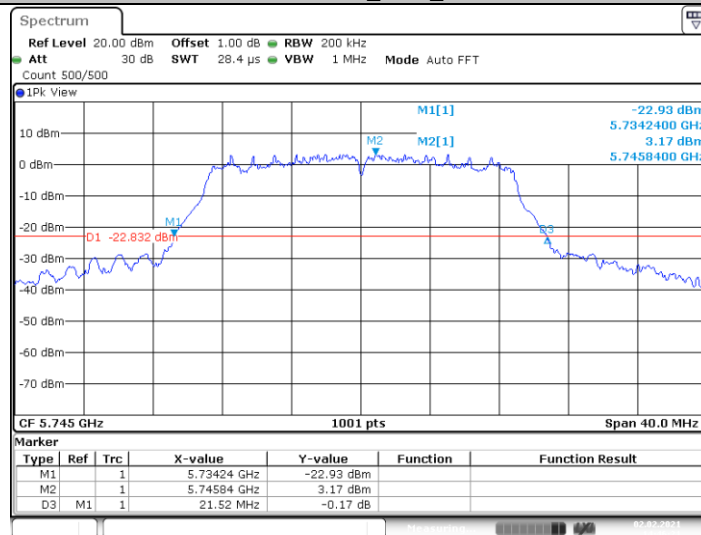
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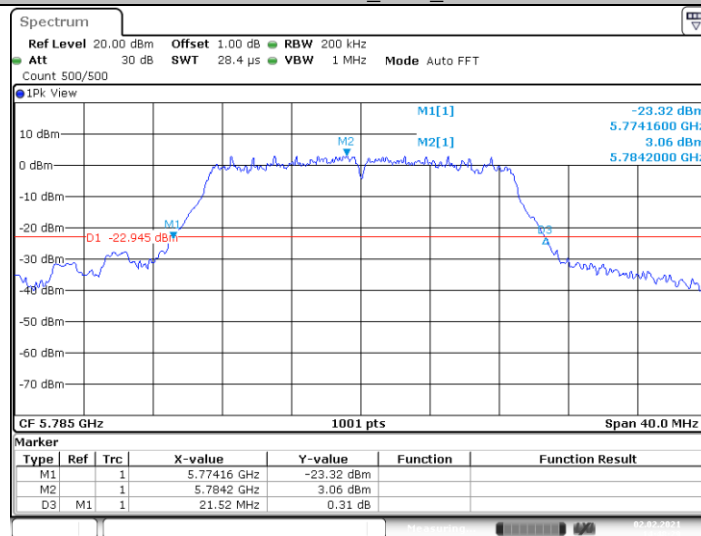
## 11AC20SISO\_Ant1\_5240



## 11AC20SISO\_Ant1\_5745



## 11AC20SISO\_Ant1\_5785



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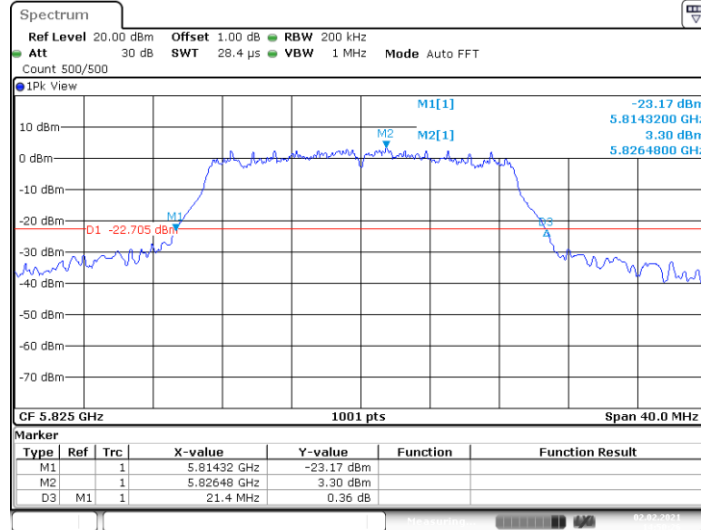
Http://www.sz-ctc.org.cn



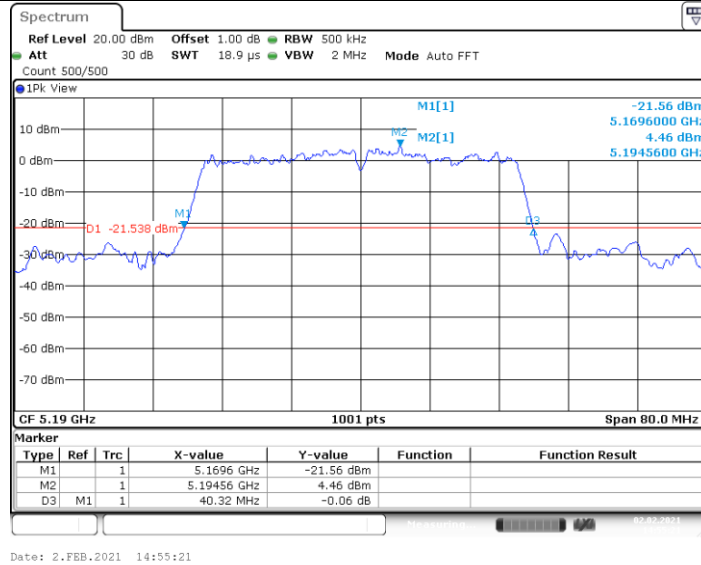
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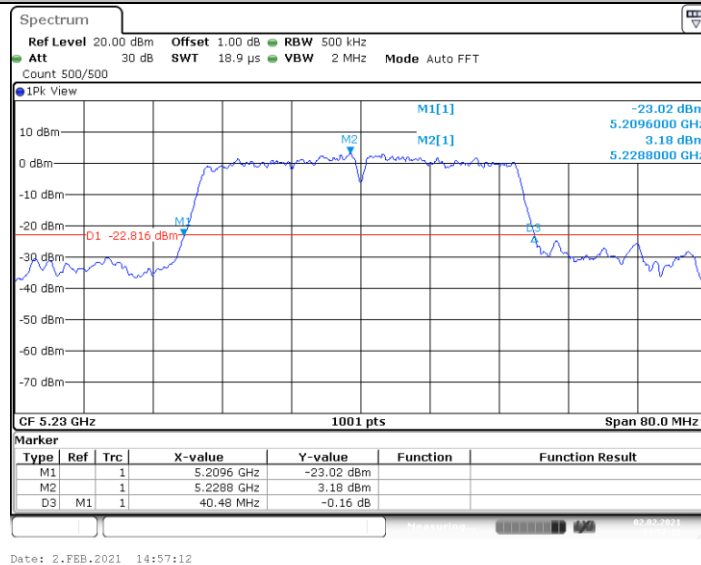
## 11AC20SISO\_Ant1\_5825



## 11AC40SISO\_Ant1\_5190



## 11AC40SISO\_Ant1\_5230



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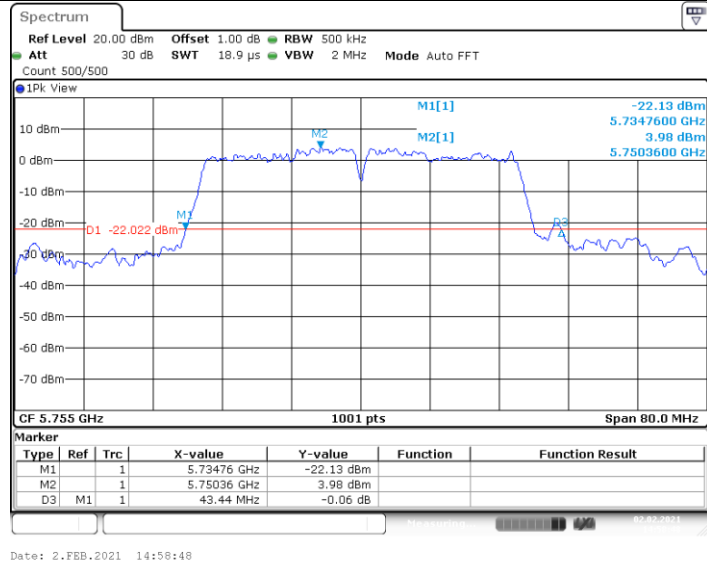


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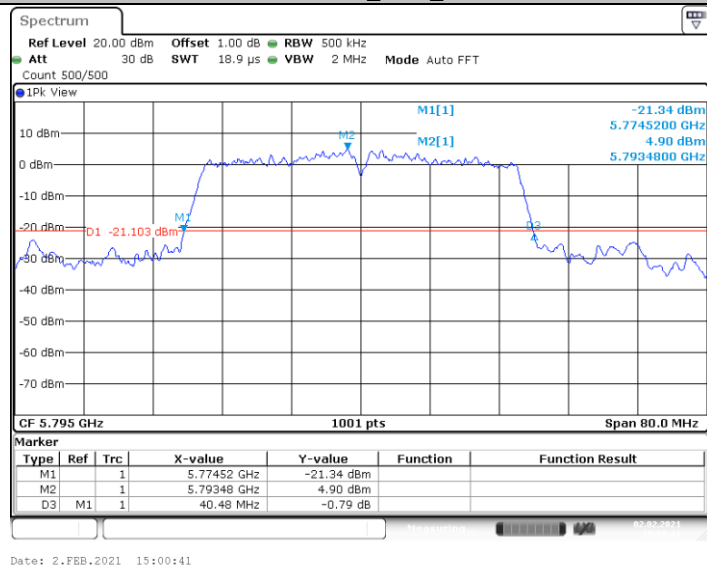




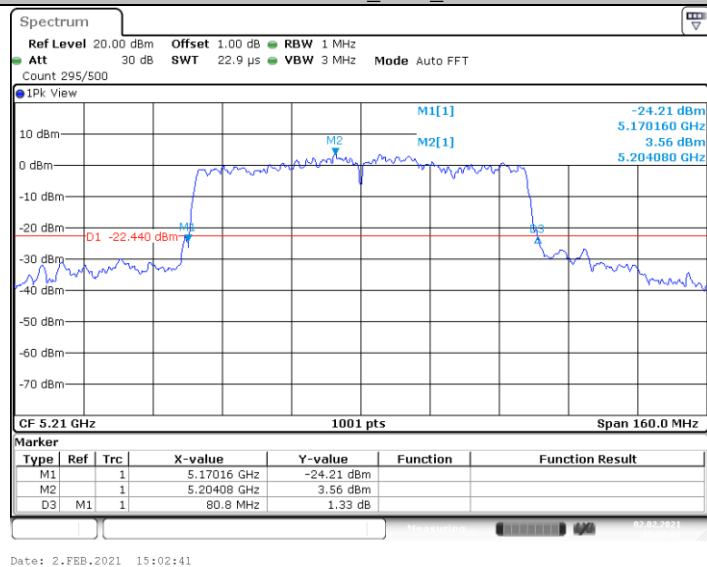
## 11AC40SISO\_Ant1\_5755



## 11AC40SISO\_Ant1\_5795



## 11AC80SISO\_Ant1\_5210



CTC Laboratories, Inc.

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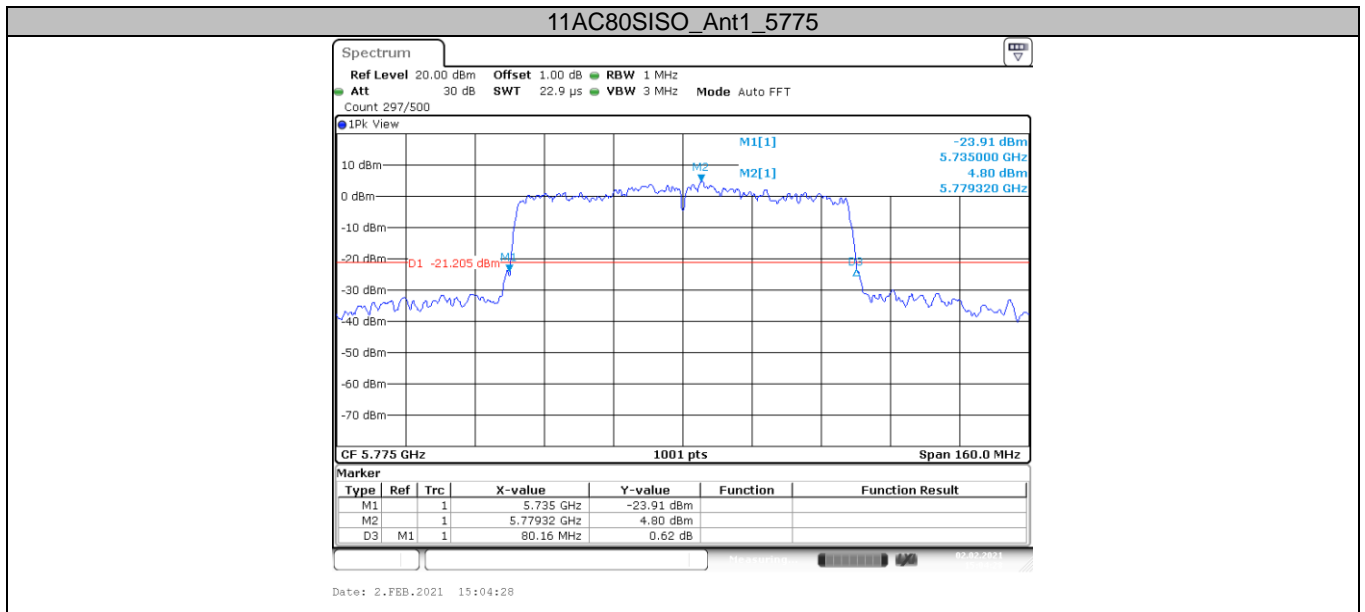
Tel.: (86)755-27521059

Fax: (86)755-27521011

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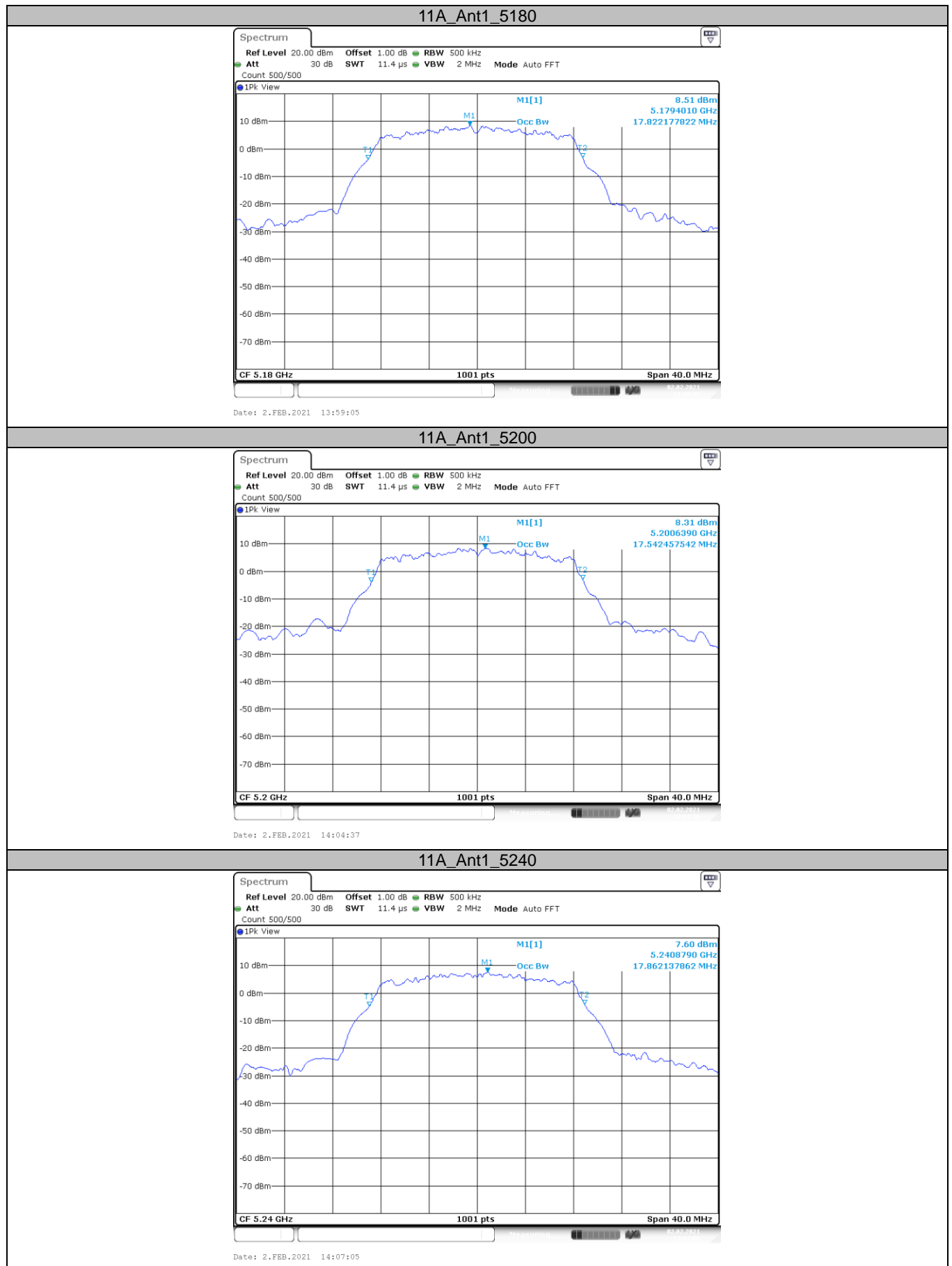
## Appendix A2: Occupied channel bandwidth

### Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Verdict
11A	Ant1	5180	17.822	5170.929	5188.751	PASS
		5200	17.542	5191.209	5208.751	PASS
		5240	17.862	5231.049	5248.911	PASS
		5745	17.662	5736.209	5753.871	PASS
		5785	17.822	5775.969	5793.791	PASS
		5825	17.463	5816.169	5833.631	PASS
11N20SISO	Ant1	5180	18.861	5170.410	5189.271	PASS
		5200	18.382	5190.889	5209.271	PASS
		5240	18.142	5230.969	5249.111	PASS
		5745	18.462	5735.809	5754.271	PASS
		5785	18.462	5775.649	5794.111	PASS
		5825	18.741	5815.609	5834.351	PASS
11N40SISO	Ant1	5190	36.444	5171.858	5208.302	PASS
		5230	36.364	5211.938	5248.302	PASS
		5755	36.284	5736.858	5773.142	PASS
		5795	36.204	5776.858	5813.062	PASS
11AC20SISO	Ant1	5180	18.262	5171.049	5189.311	PASS
		5200	18.382	5190.889	5209.271	PASS
		5240	18.541	5230.689	5249.231	PASS
		5745	18.382	5735.809	5754.191	PASS
		5785	18.342	5775.889	5794.231	PASS
		5825	18.661	5815.649	5834.311	PASS
11AC40SISO	Ant1	5190	37.243	5171.299	5208.541	PASS
		5230	36.763	5211.618	5248.382	PASS
		5755	36.603	5736.778	5773.382	PASS
		5795	36.843	5776.538	5813.382	PASS
11AC80SISO	Ant1	5210	75.924	5172.118	5248.042	PASS
		5775	75.924	5736.958	5812.882	PASS



## Test Graphs



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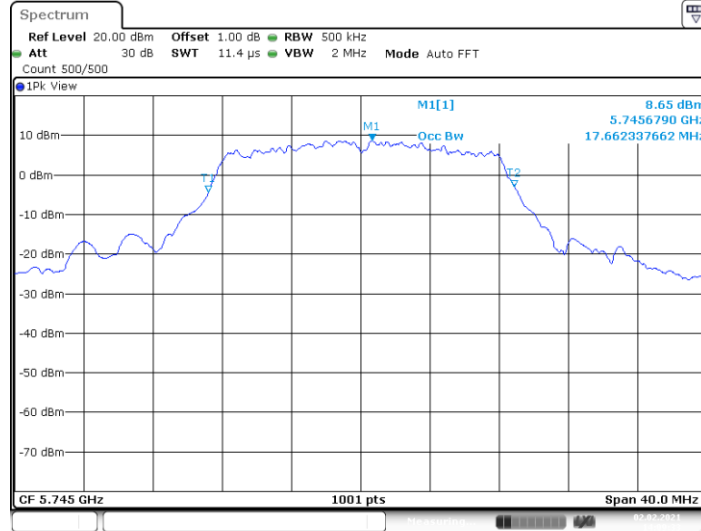
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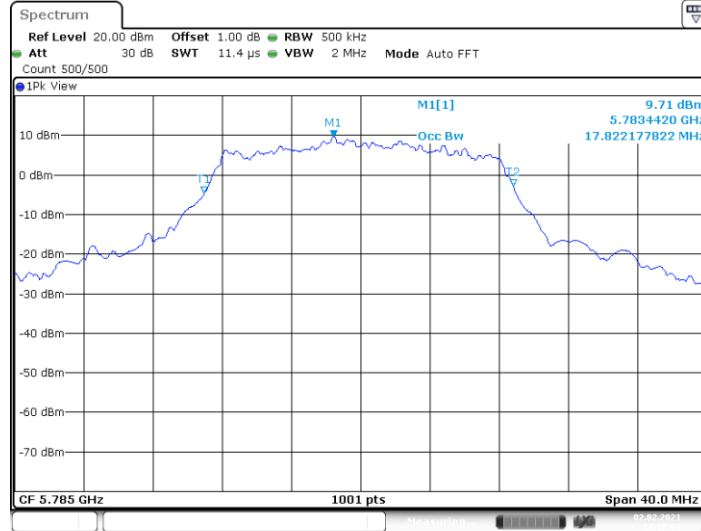


## 11A\_Ant1\_5745



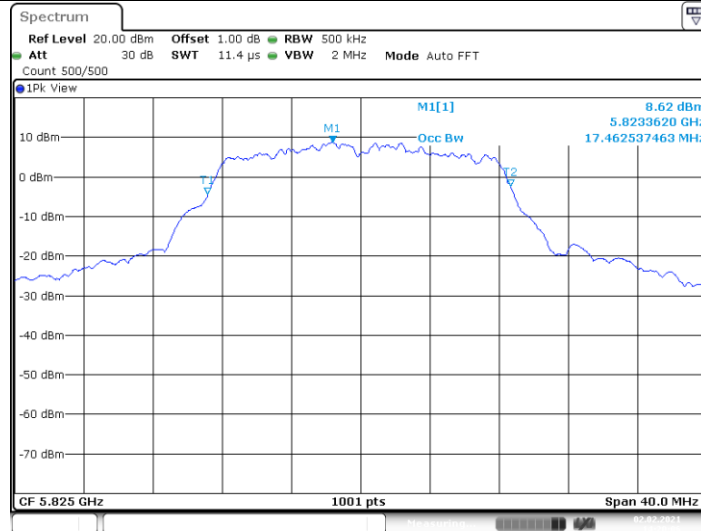
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## 11A\_Ant1\_5785



Date: 2.FEB.2021 14:18:09

## 11A\_Ant1\_5825



Date: 2.FEB.2021 14:20:05

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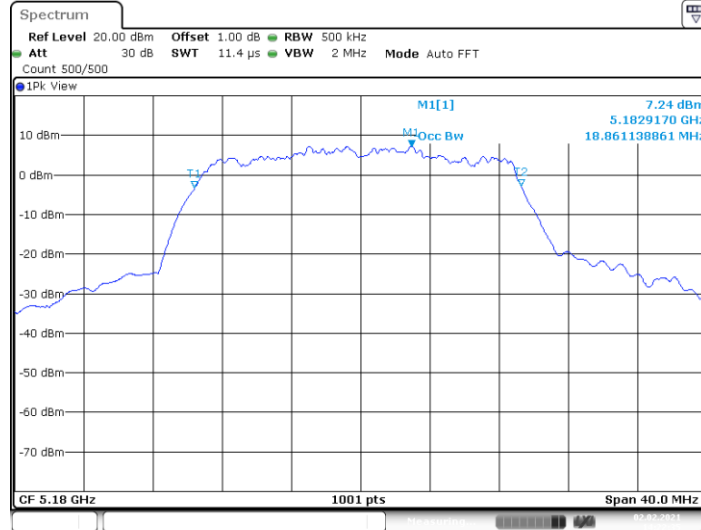
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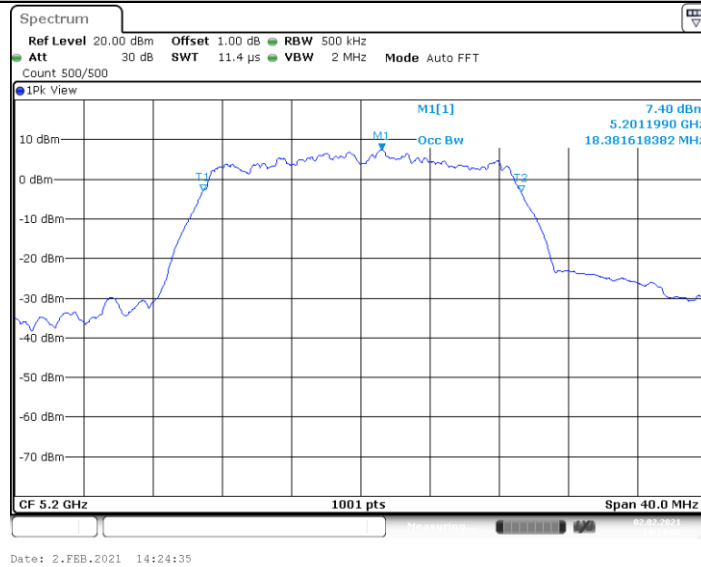
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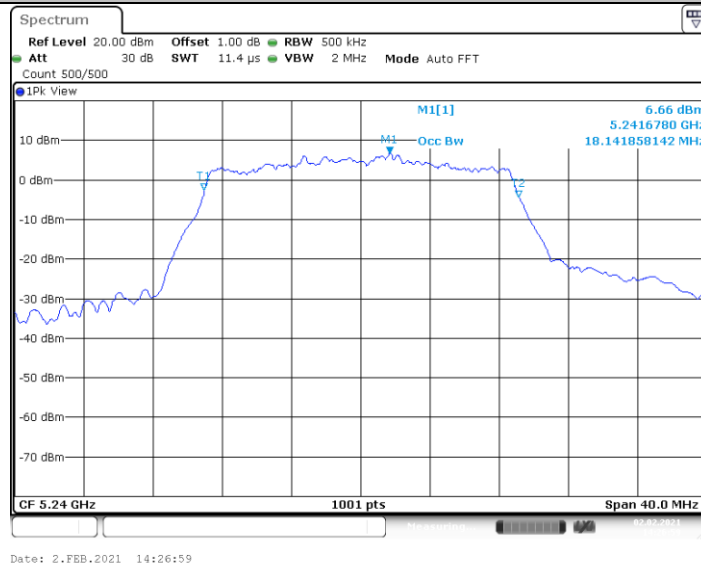
## 11N20SISO\_Ant1\_5180



## 11N20SISO\_Ant1\_5200



## 11N20SISO\_Ant1\_5240



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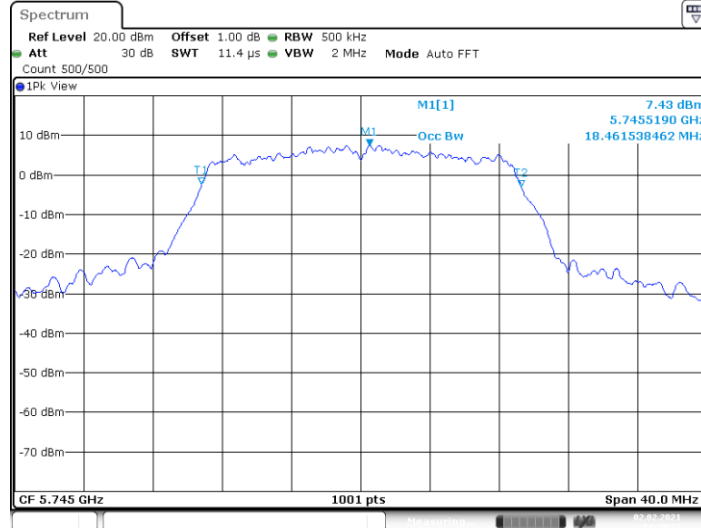
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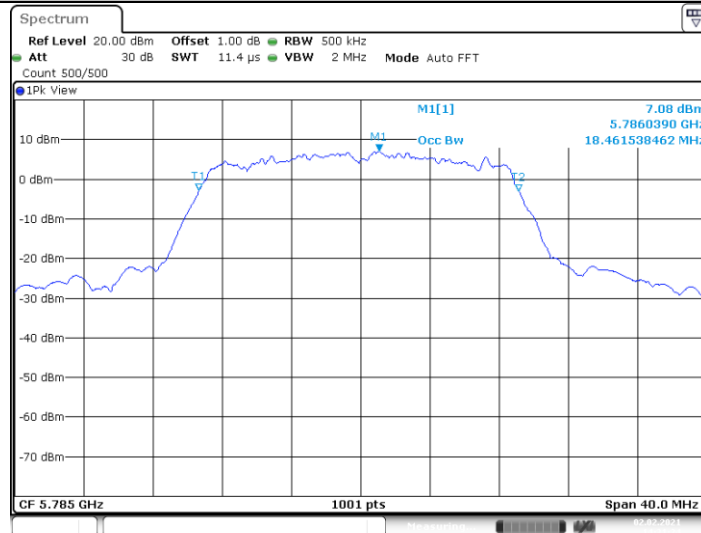


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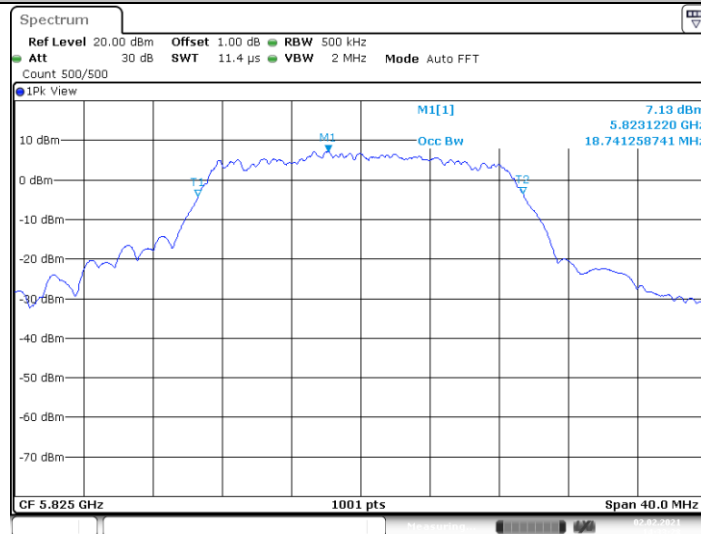
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## 11N20SISO\_Ant1\_5785



Date: 2.FEB.2021 14:31:34

## 11N20SISO\_Ant1\_5825



Date: 2.FEB.2021 14:33:28

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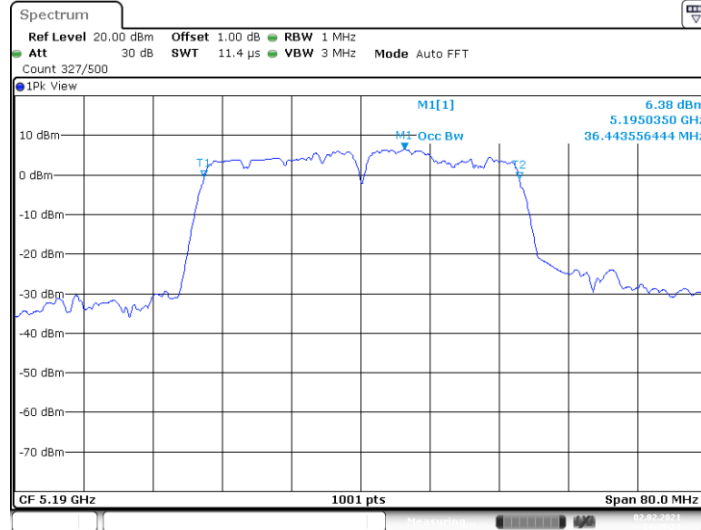
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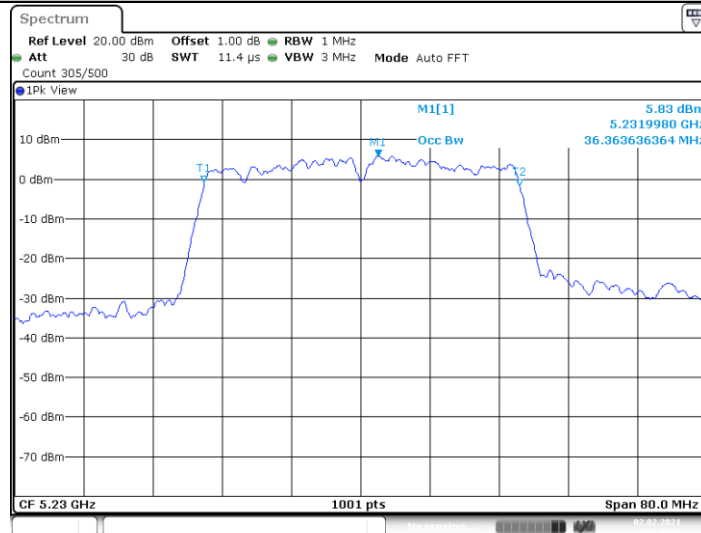


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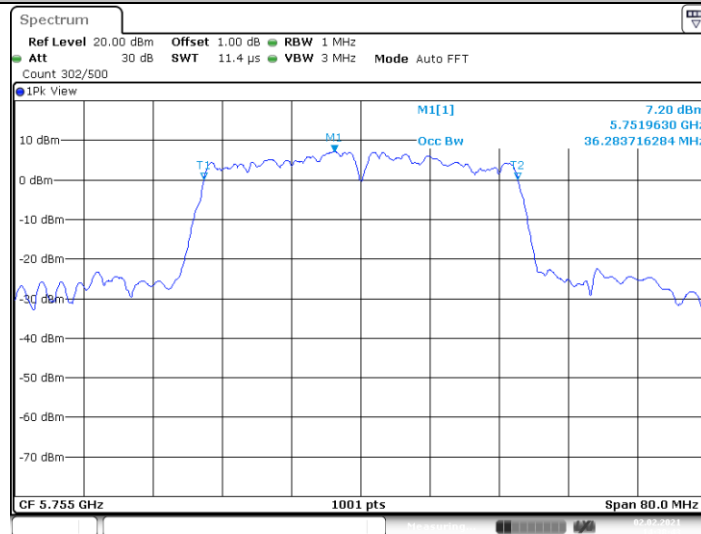
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## 11N40SISO\_Ant1\_5230



Date: 2.FEB.2021 14:36:53

## 11N40SISO\_Ant1\_5755



Date: 2.FEB.2021 14:38:43

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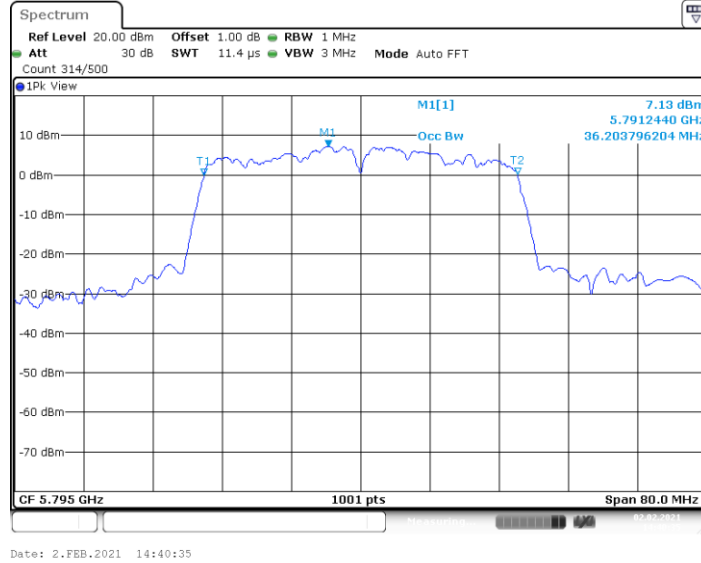


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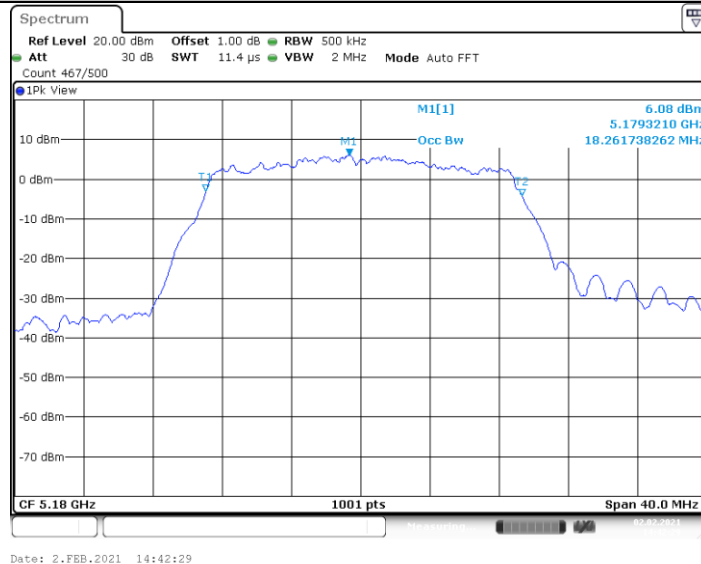




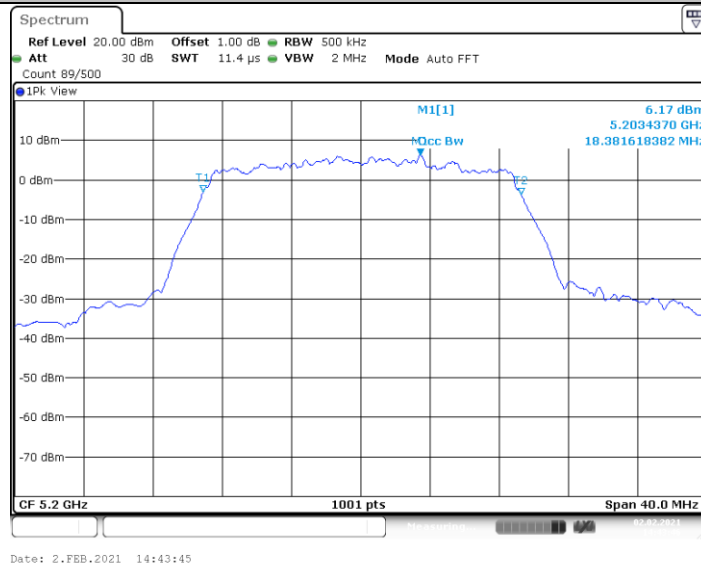
## 11N40SISO\_Ant1\_5795



## 11AC20SISO\_Ant1\_5180



## 11AC20SISO\_Ant1\_5200



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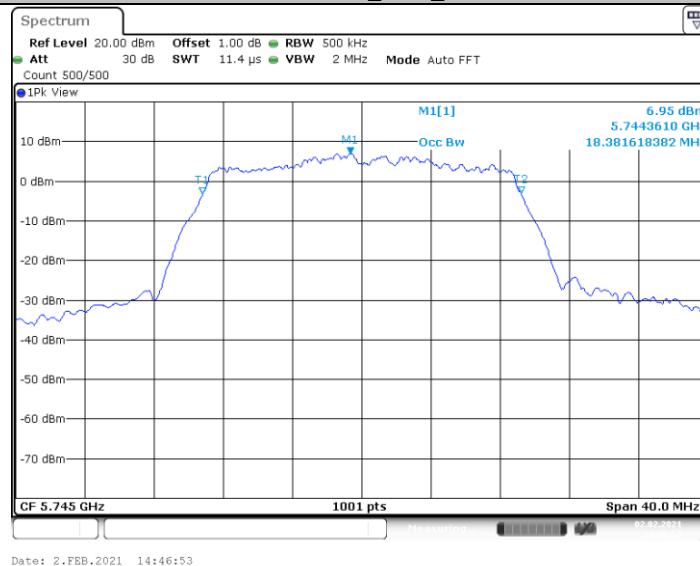
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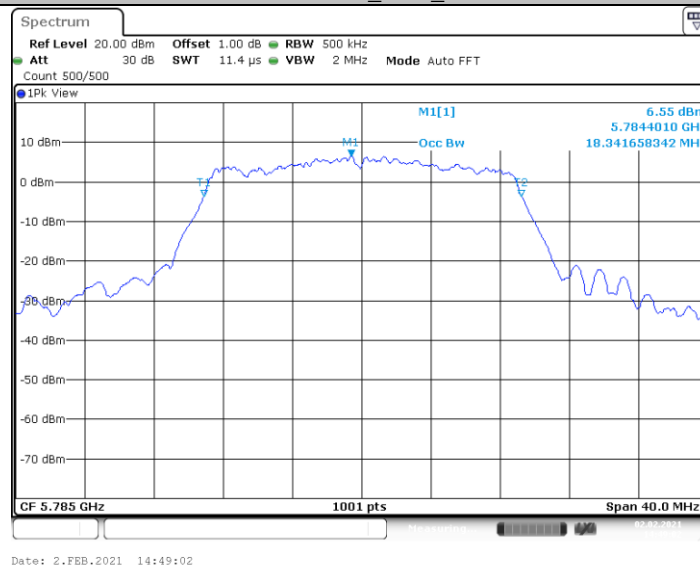
## 11AC20SISO\_Ant1\_5240



## 11AC20SISO\_Ant1\_5745



## 11AC20SISO\_Ant1\_5785



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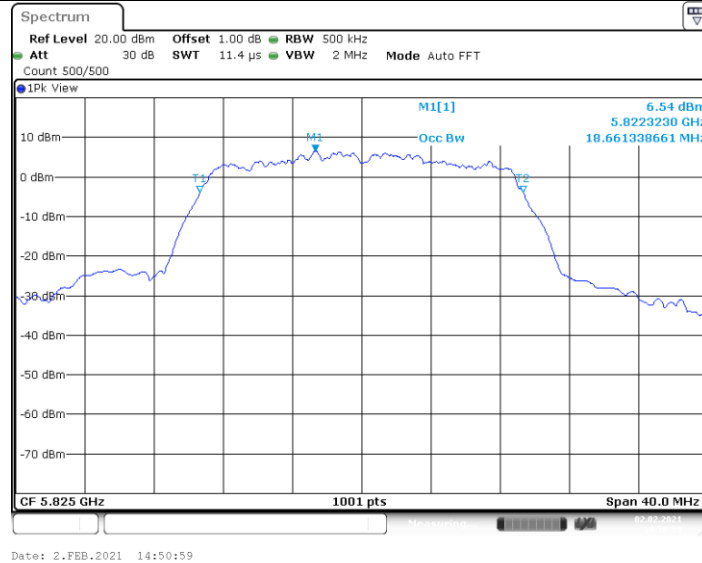
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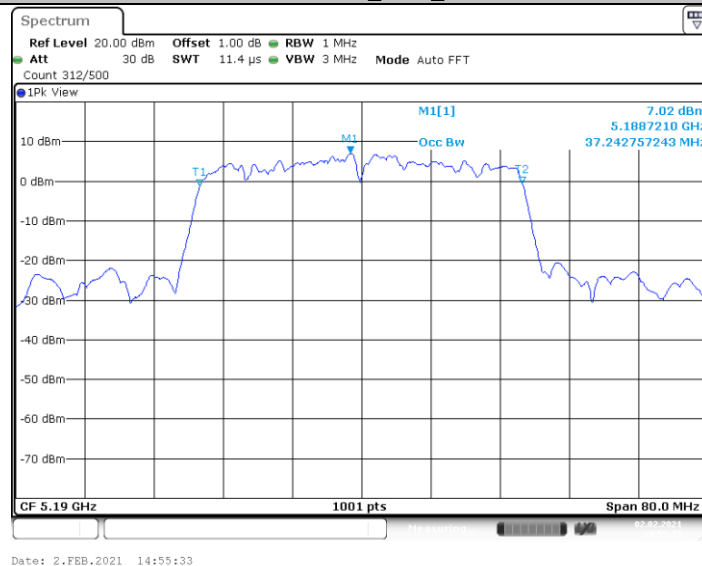
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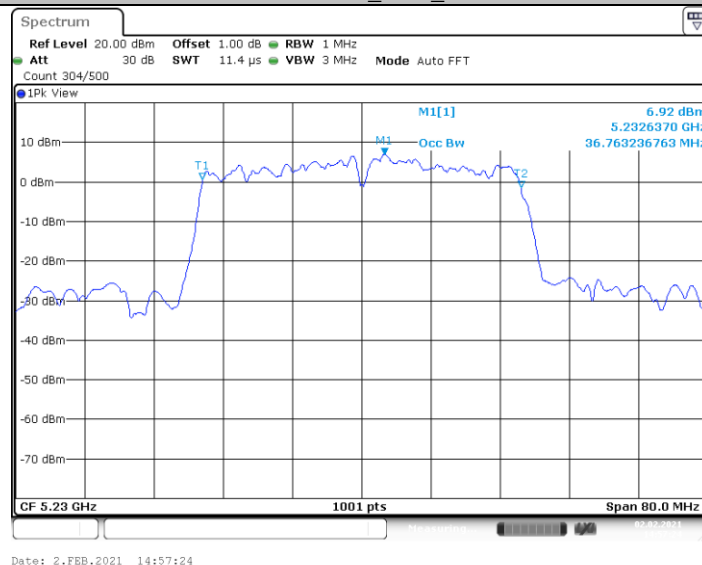
## 11AC20SISO\_Ant1\_5825



## 11AC40SISO\_Ant1\_5190



## 11AC40SISO\_Ant1\_5230



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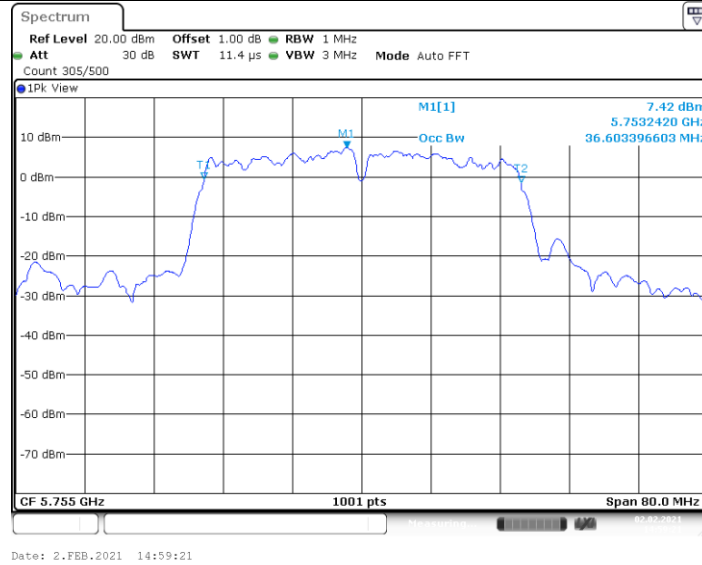
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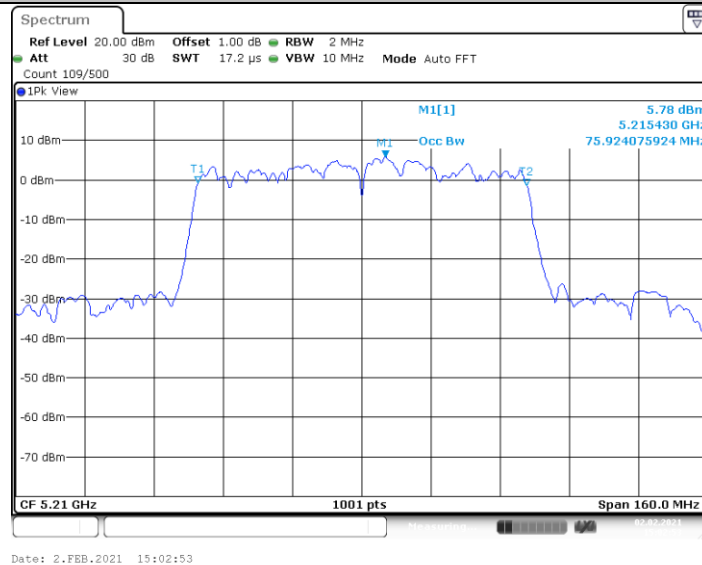
## 11AC40SISO\_Ant1\_5755



## 11AC40SISO\_Ant1\_5795



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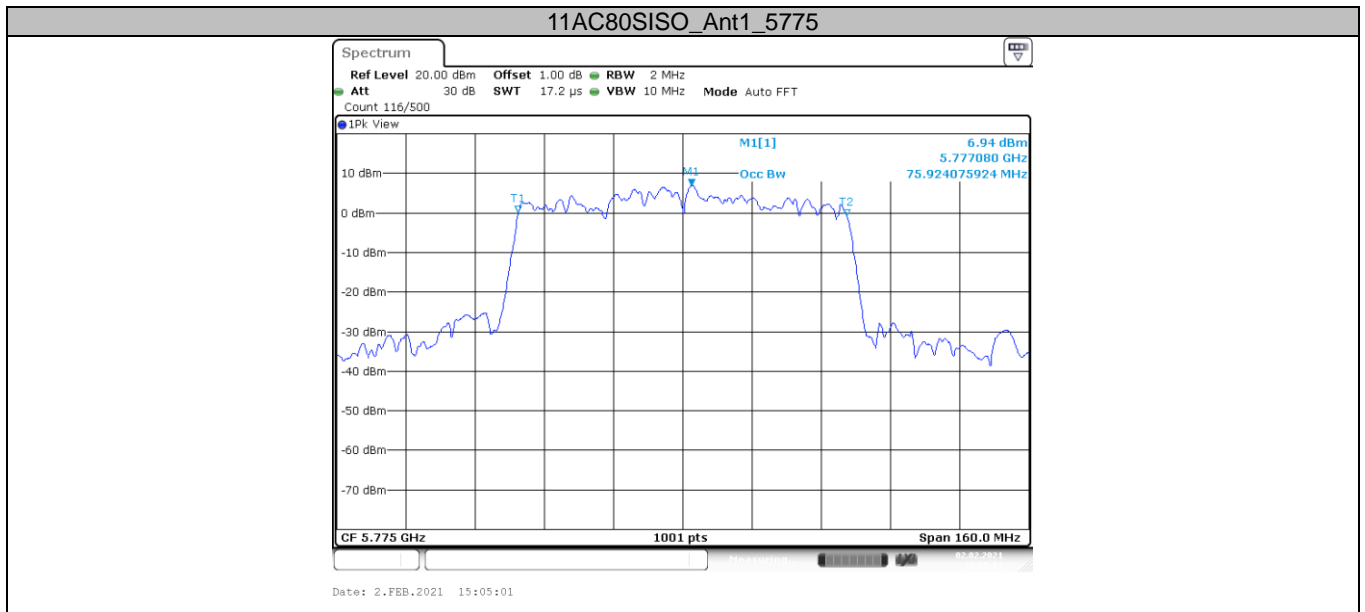
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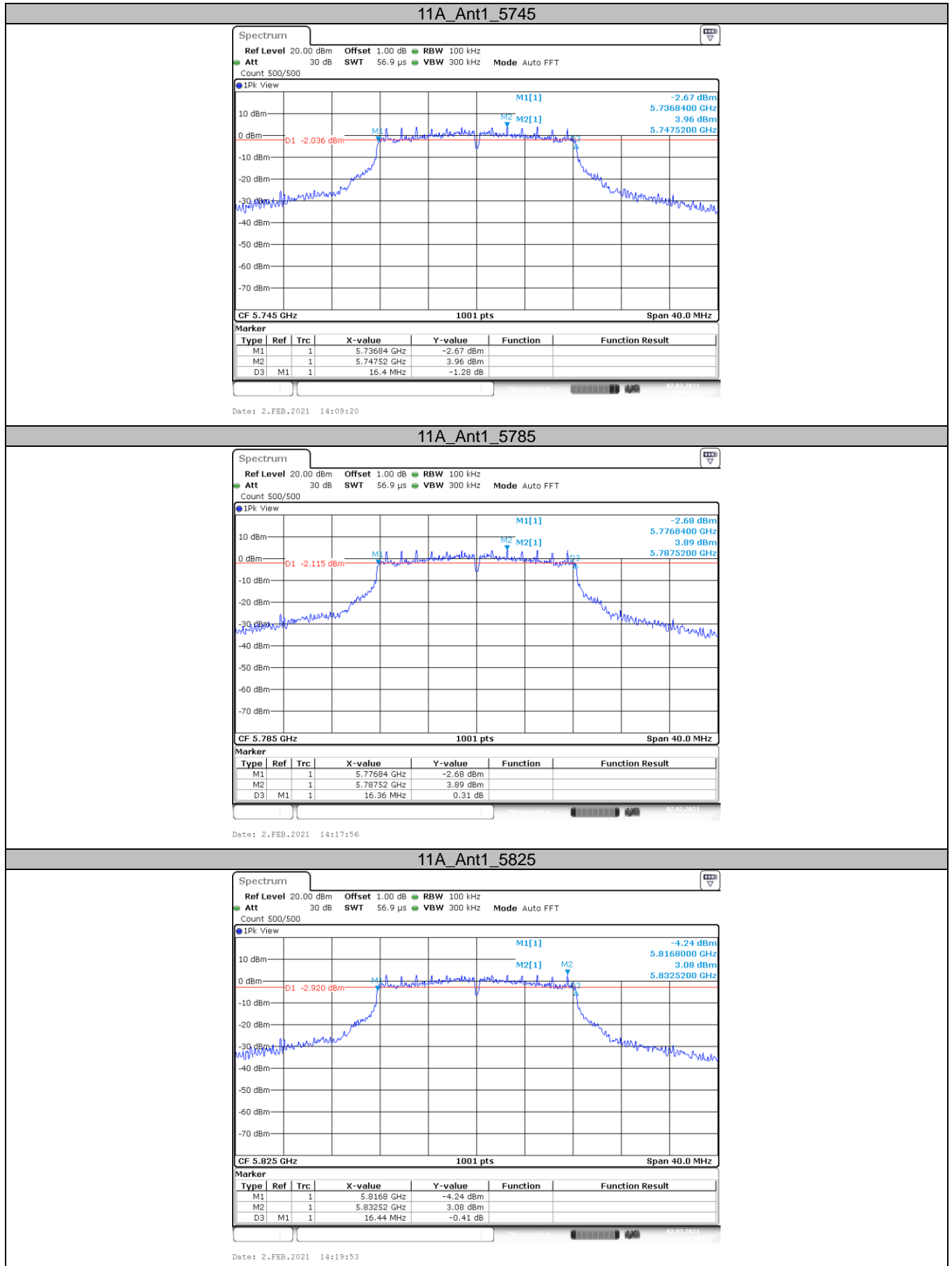
## Appendix A3: Min emission bandwidth

### Test Result

TestMode	Antenna	Channel	6db EBW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
11A	Ant1	5745	16.400	5736.840	5753.240	0.5	PASS
		5785	16.360	5776.840	5793.200	0.5	PASS
		5825	16.440	5816.800	5833.240	0.5	PASS
11N20SISO	Ant1	5745	17.640	5736.200	5753.840	0.5	PASS
		5785	17.640	5776.200	5793.840	0.5	PASS
		5825	17.640	5816.200	5833.840	0.5	PASS
11N40SISO	Ant1	5755	35.360	5737.320	5772.680	0.5	PASS
		5795	36.240	5776.760	5813.000	0.5	PASS
11AC20SISO	Ant1	5745	17.120	5736.480	5753.600	0.5	PASS
		5785	17.640	5776.200	5793.840	0.5	PASS
		5825	17.640	5816.200	5833.840	0.5	PASS
11AC40SISO	Ant1	5755	36.480	5736.760	5773.240	0.5	PASS
		5795	36.640	5776.680	5813.320	0.5	PASS
11AC80SISO	Ant1	5775	75.520	5737.240	5812.760	0.5	PASS



## Test Graphs



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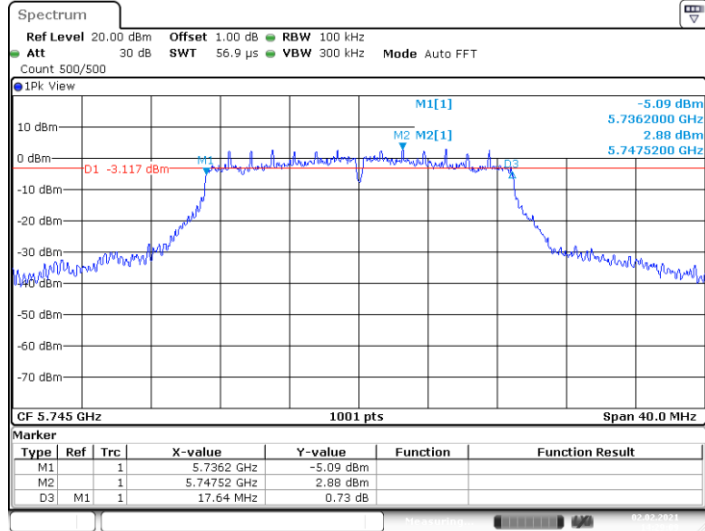
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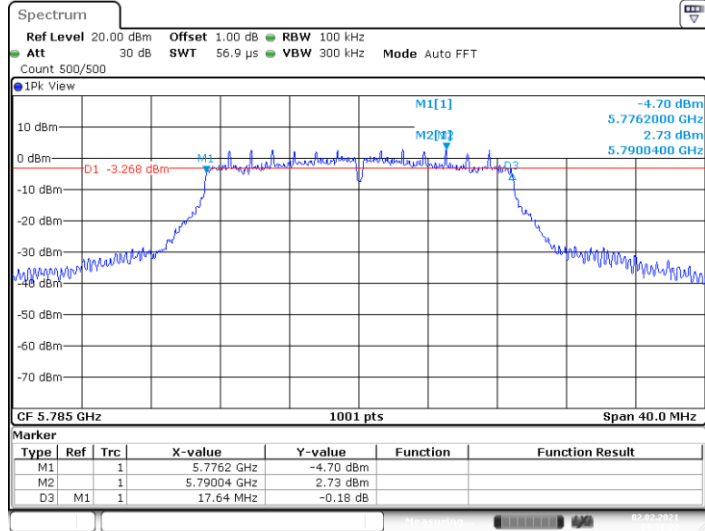


## 11N20SISO\_Ant1\_5745



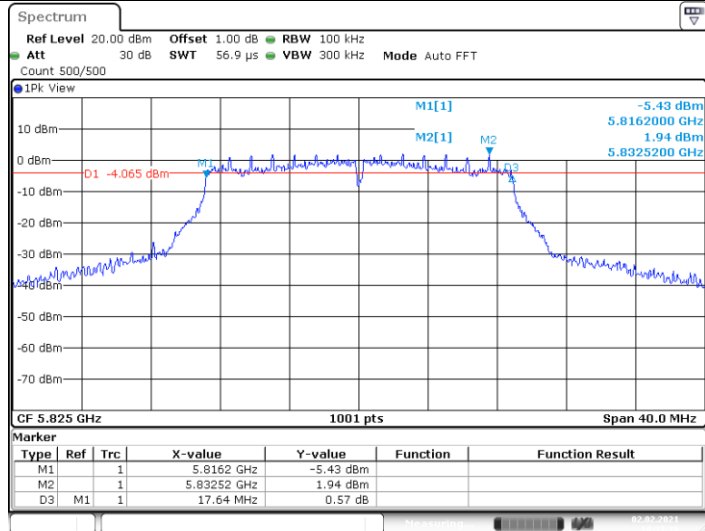
Date: 2.FEB.2021 14:29:09

## 11N20SISO\_Ant1\_5785



Date: 2.FEB.2021 14:31:22

## 11N20SISO\_Ant1\_5825



Date: 2.FEB.2021 14:33:15

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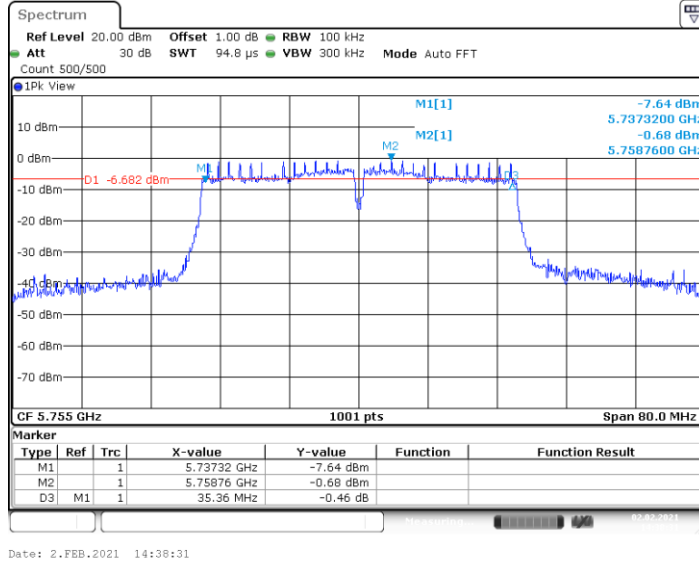
Http://www.sz-ctc.org.cn

For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : [yz.cnca.cn](http://yz.cnca.cn)

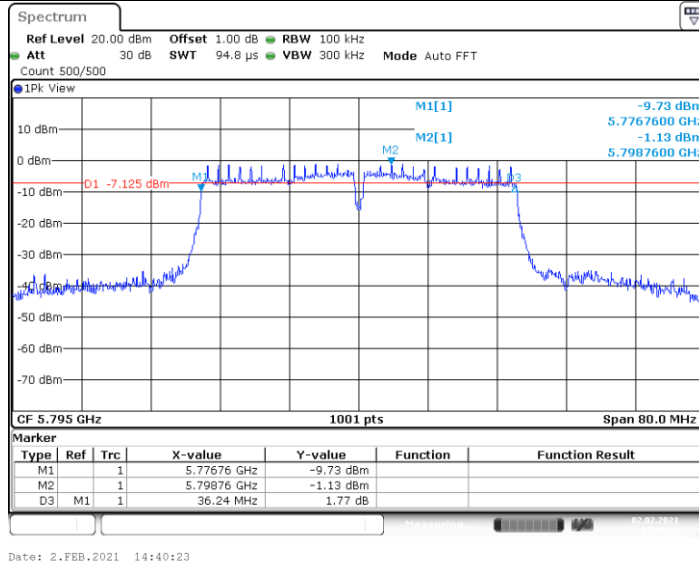




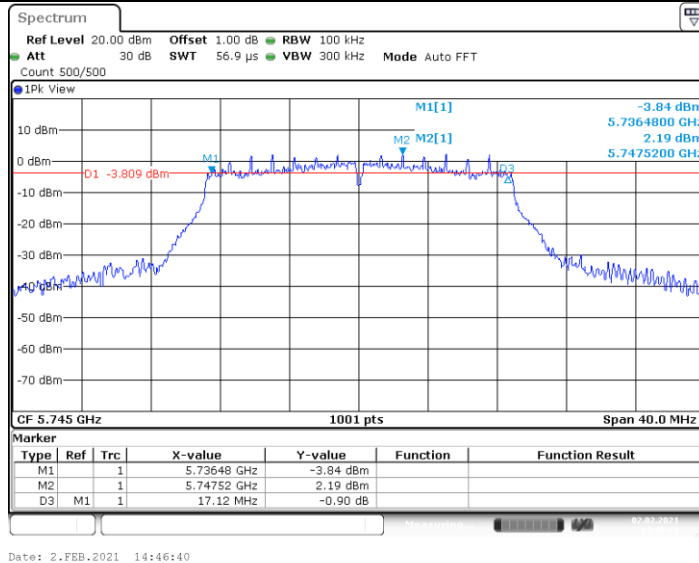
## 11N40SISO\_Ant1\_5755



## 11N40SISO\_Ant1\_5795



## 11AC20SISO\_Ant1\_5745



CTC Laboratories, Inc.

1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

Tel.: (86)755-27521059

Fax: (86)755-27521011

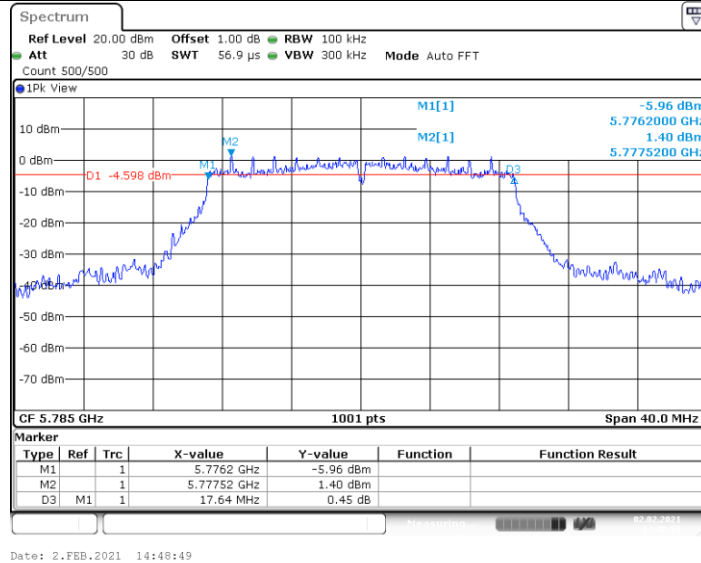
Http://www.sz-ctc.org.cn



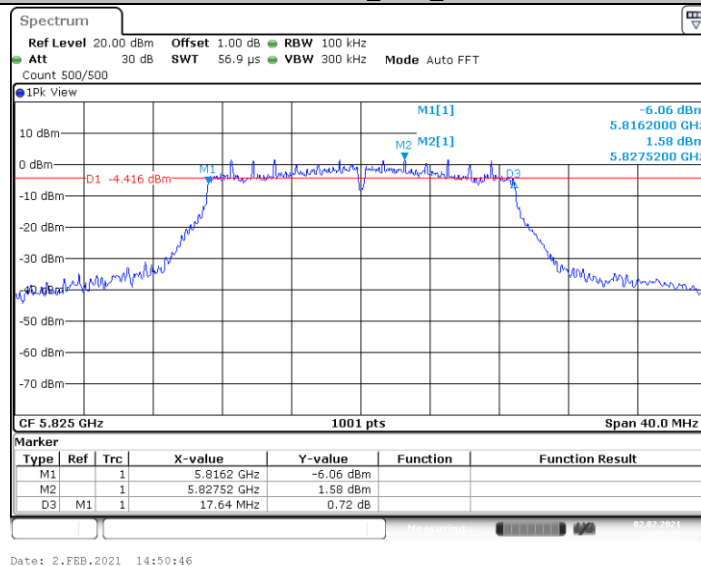
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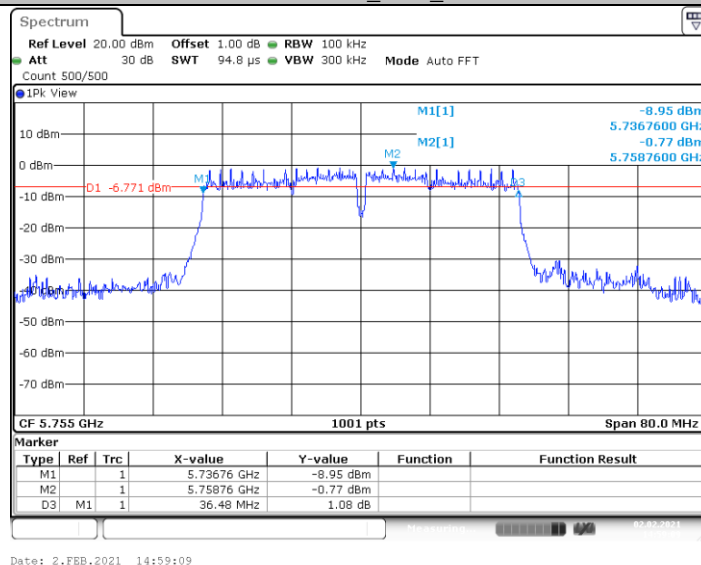
## 11AC20SISO\_Ant1\_5785



## 11AC20SISO\_Ant1\_5825



## 11AC40SISO\_Ant1\_5755



CTC Laboratories, Inc.

1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

Tel.: (86)755-27521059

Fax: (86)755-27521011

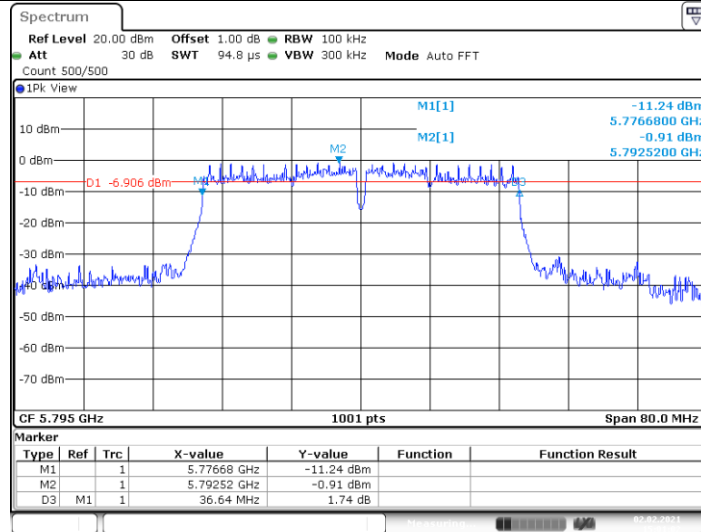
Http://www.sz-ctc.org.cn



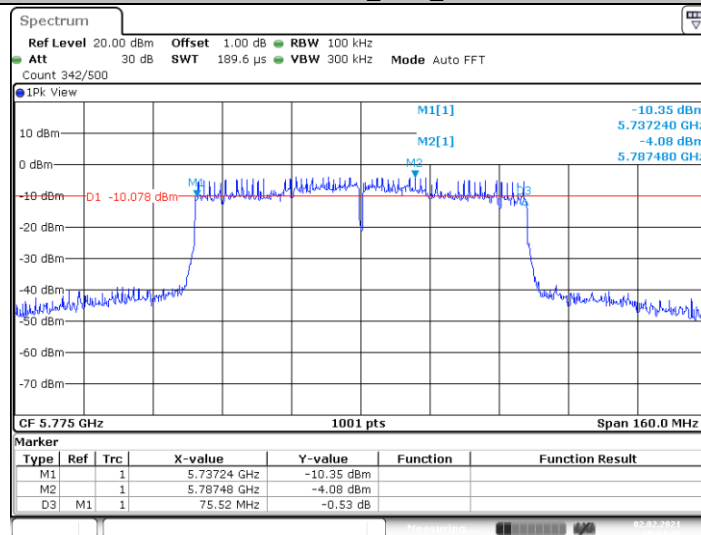
For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : [yz.cnca.cn](http://yz.cnca.cn)



## 11AC40SISO\_Ant1\_5795



## 11AC80SISO\_Ant1\_5775



CTC Laboratories, Inc.

1-2/F., Building 2, Jiaquan Building, Guanlan High-Tech Park, Shenzhen, Guangdong, China

Tel.: (86)755-27521059

Fax: (86)755-27521011

Http://www.sz-ctc.org.cn



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## Appendix B: Maximum conducted output power

### Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
11A	Ant1	5180	11.98	<=24	PASS
		5200	12.00	<=24	PASS
		5240	11.91	<=24	PASS
		5745	14.15	<=30	PASS
		5785	13.90	<=30	PASS
		5825	13.78	<=30	PASS
11N20SISO	Ant1	5180	12.56	<=24	PASS
		5200	12.25	<=24	PASS
		5240	11.61	<=24	PASS
		5745	12.92	<=30	PASS
		5785	12.71	<=30	PASS
		5825	12.57	<=30	PASS
11N40SISO	Ant1	5190	11.12	<=24	PASS
		5230	10.53	<=24	PASS
		5755	11.73	<=30	PASS
		5795	11.61	<=30	PASS
11AC20SISO	Ant1	5180	11.51	<=24	PASS
		5200	11.43	<=24	PASS
		5240	10.68	<=24	PASS
		5745	12.11	<=30	PASS
		5785	11.90	<=30	PASS
		5825	11.64	<=30	PASS
11AC40SISO	Ant1	5190	9.81	<=24	PASS
		5230	9.28	<=24	PASS
		5755	10.38	<=30	PASS
		5795	10.25	<=30	PASS
11AC80SISO	Ant1	5210	8.96	<=24	PASS
		5775	9.67	<=30	PASS