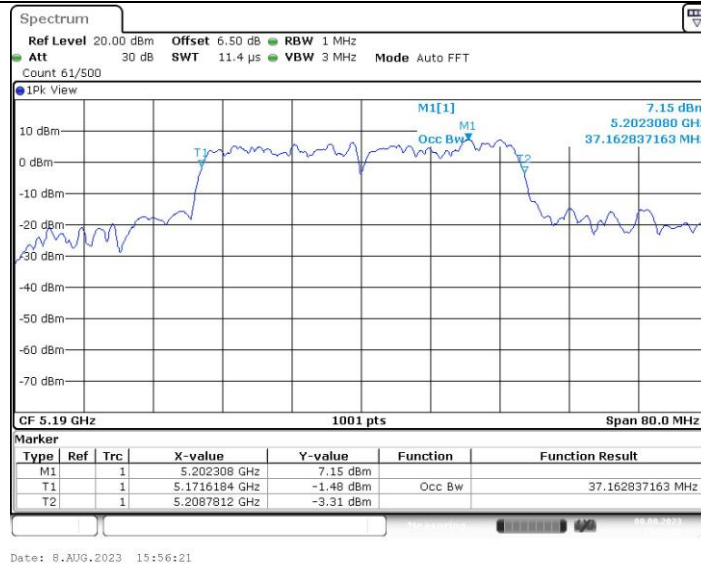
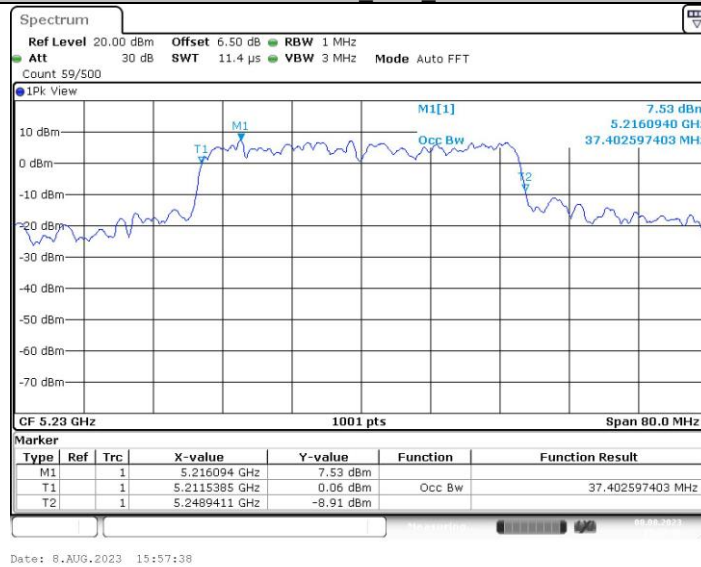
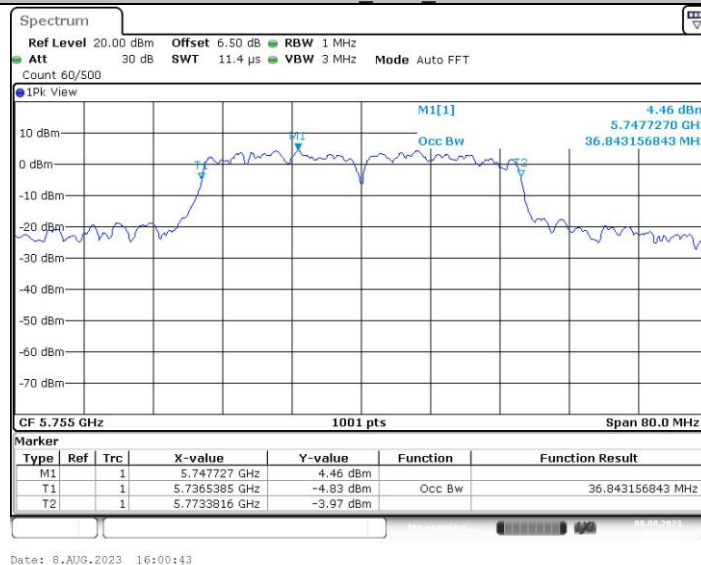




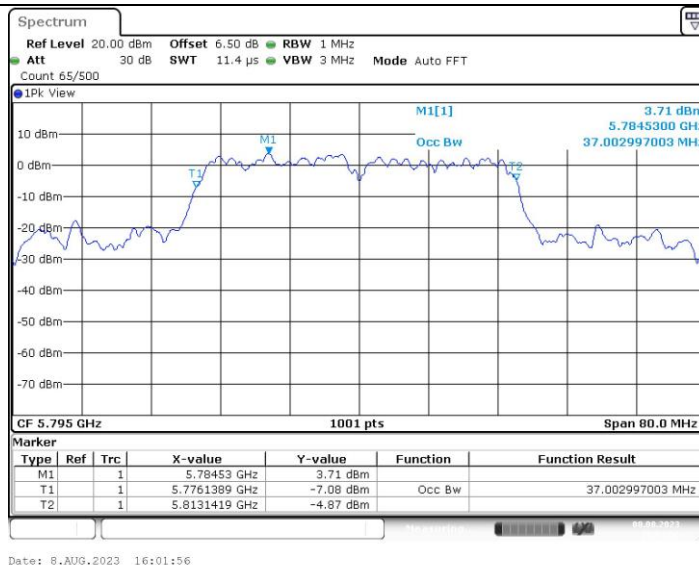
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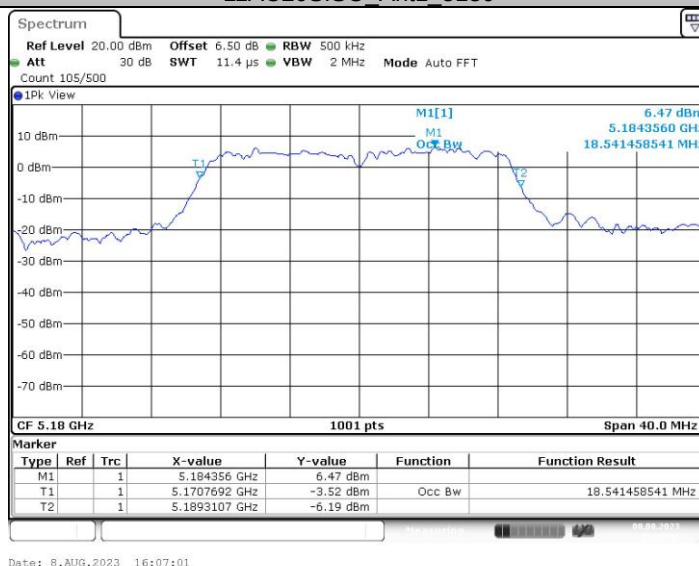
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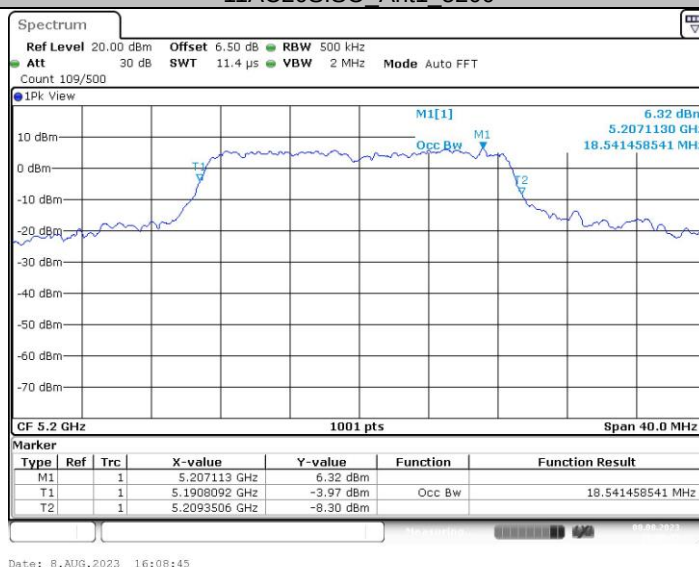
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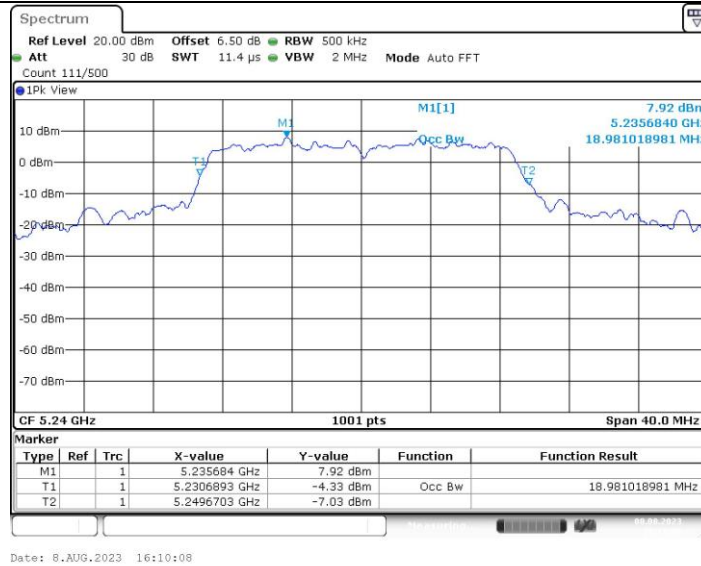
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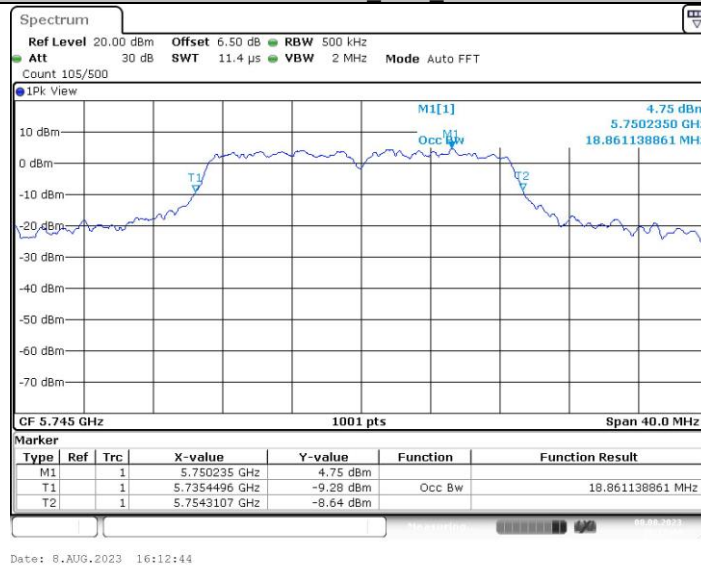
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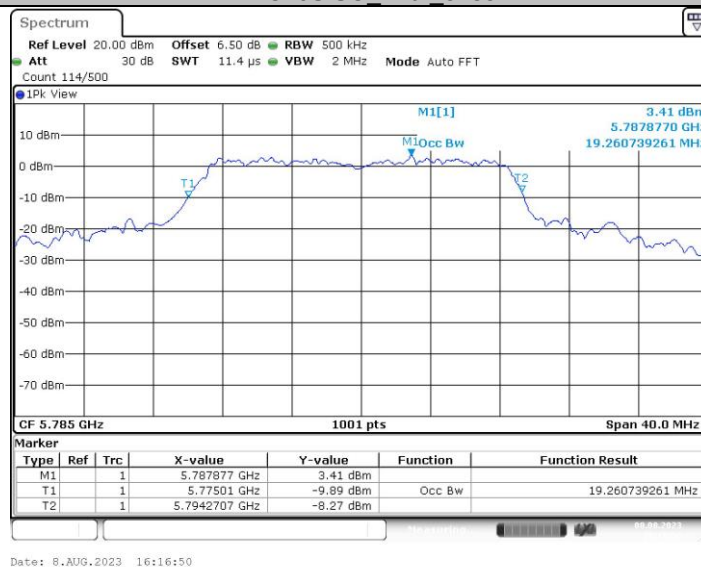
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11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



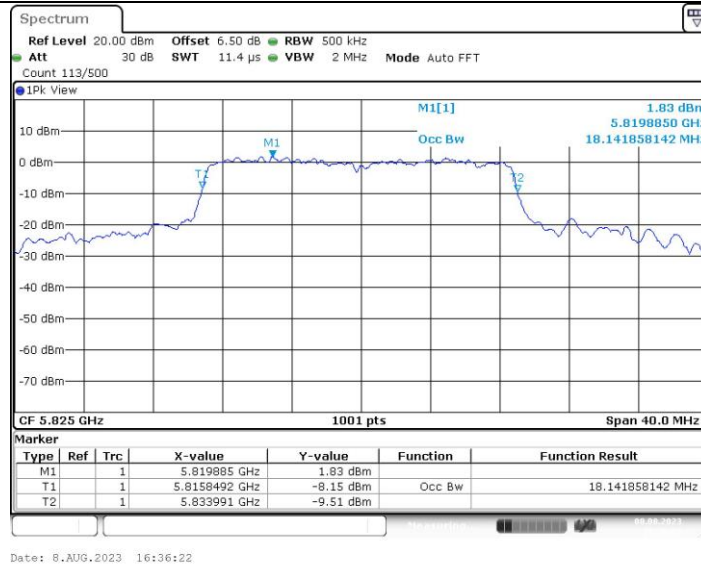
11AC20SISO_Ant1_5825

CTC Laboratories, Inc.

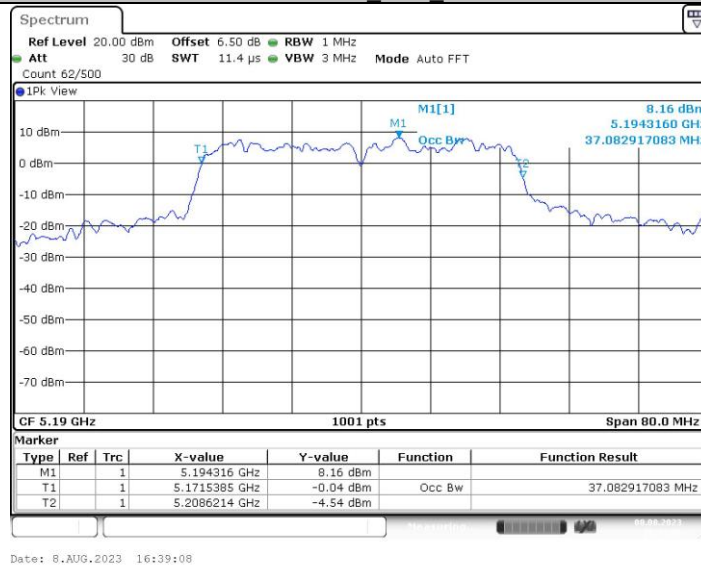
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



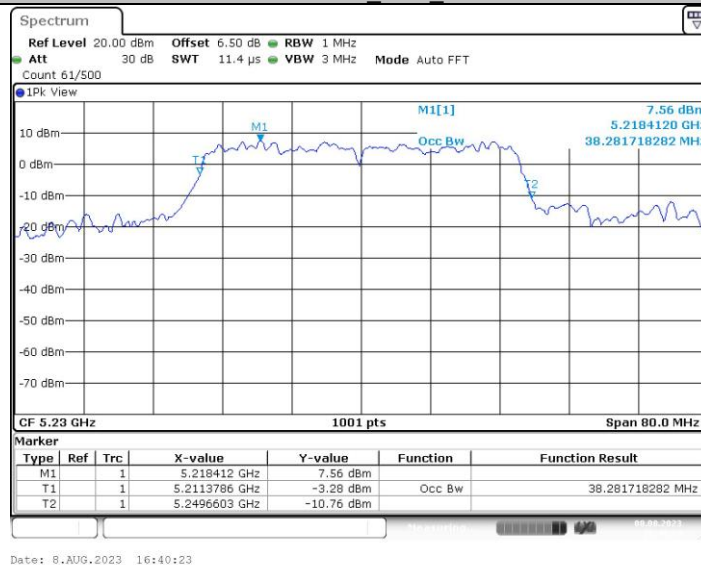
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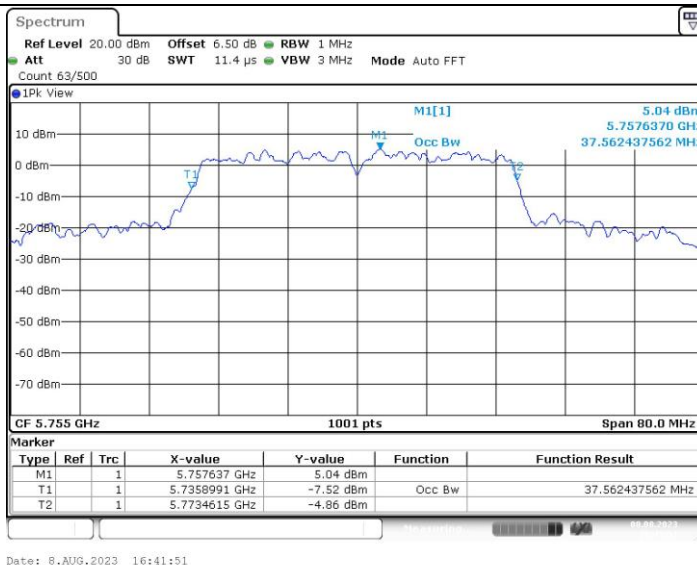
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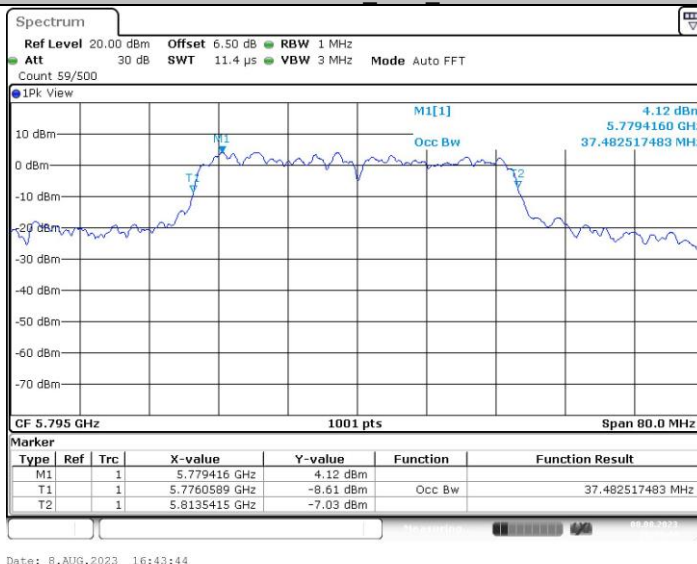
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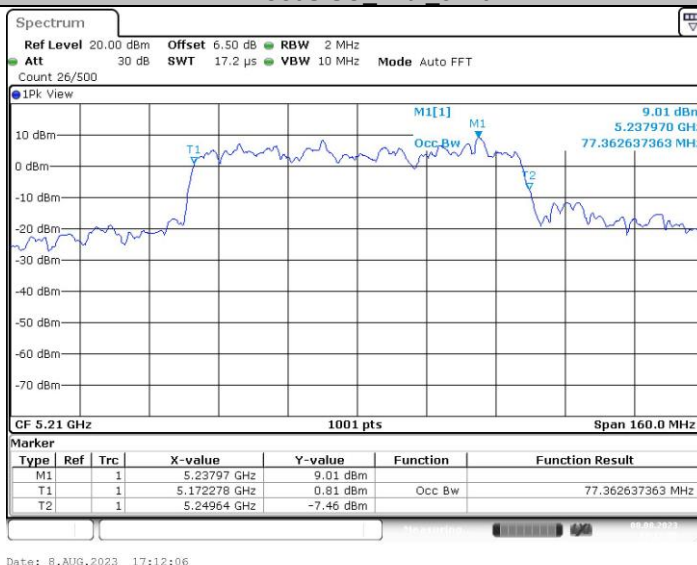
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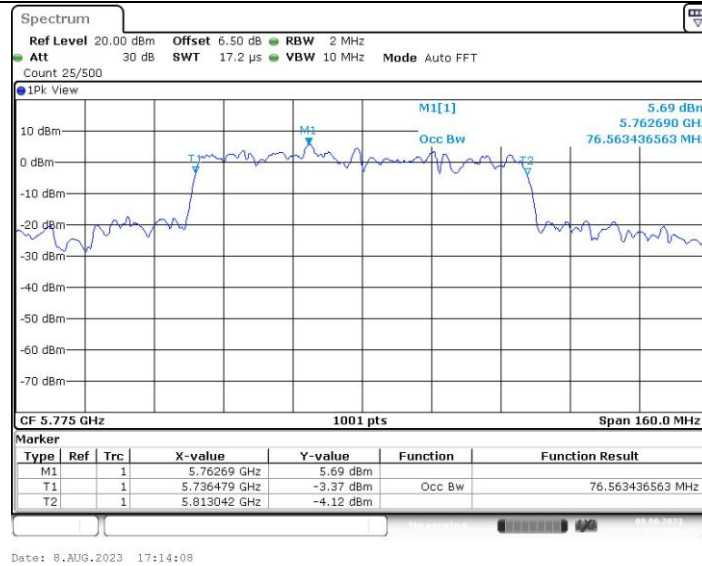
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11AC80SISO_Ant1_5210



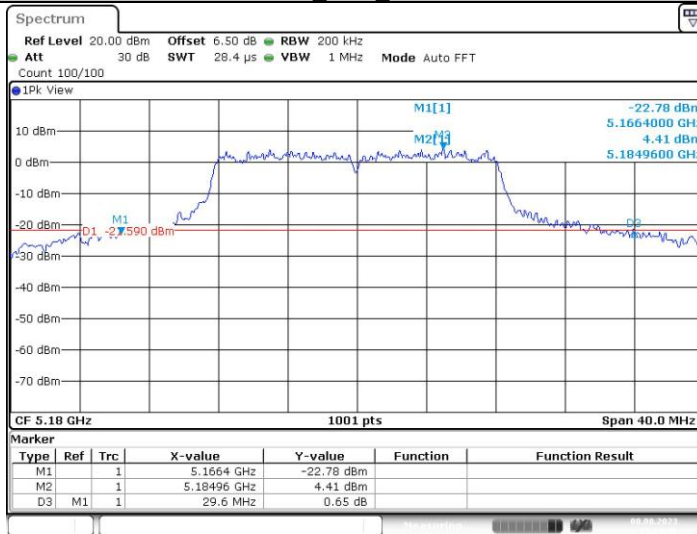
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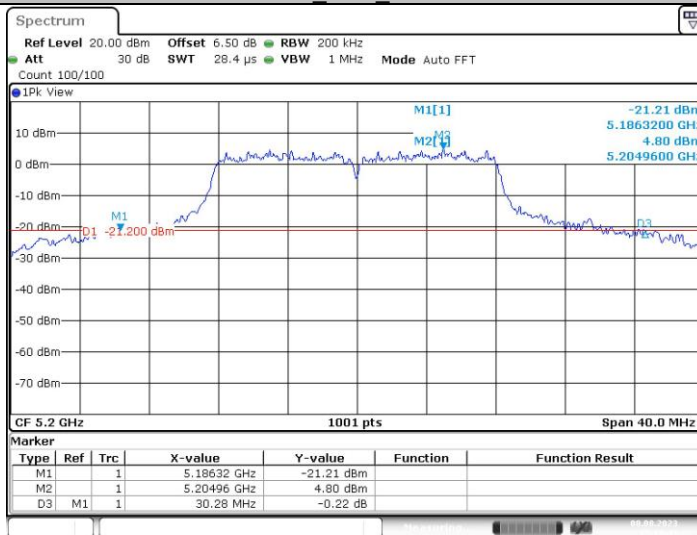


26dB Bandwidth:

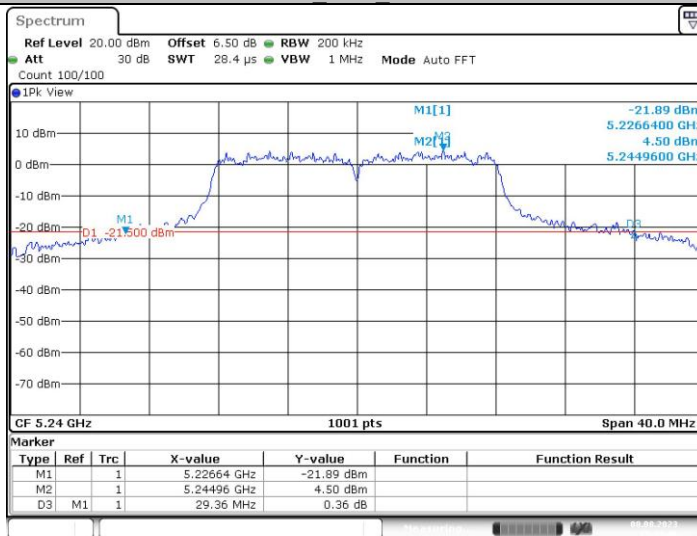
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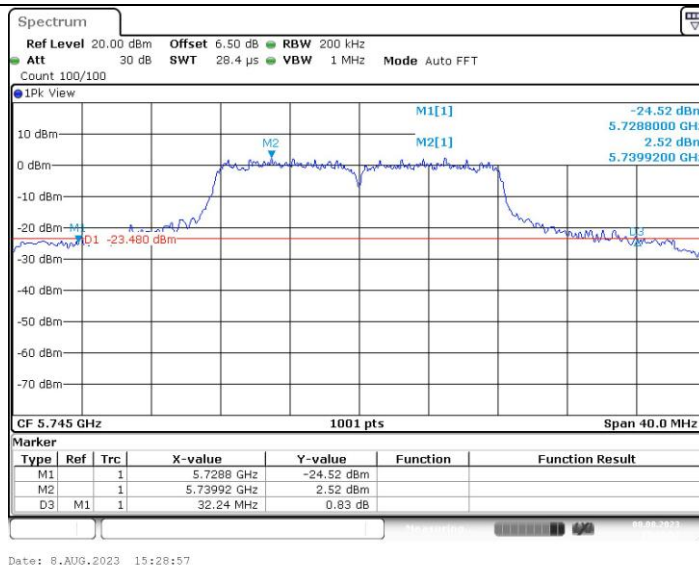
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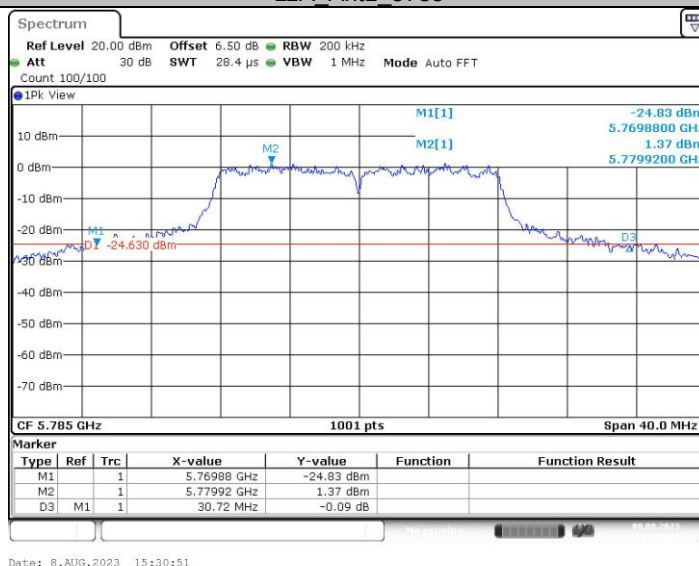
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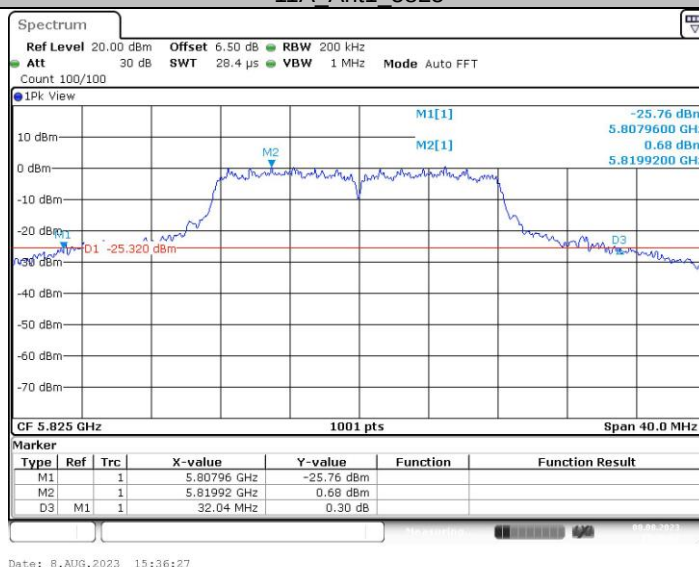
11A_Ant1_5745



11A_Ant1_5785



11A_Ant1_5825



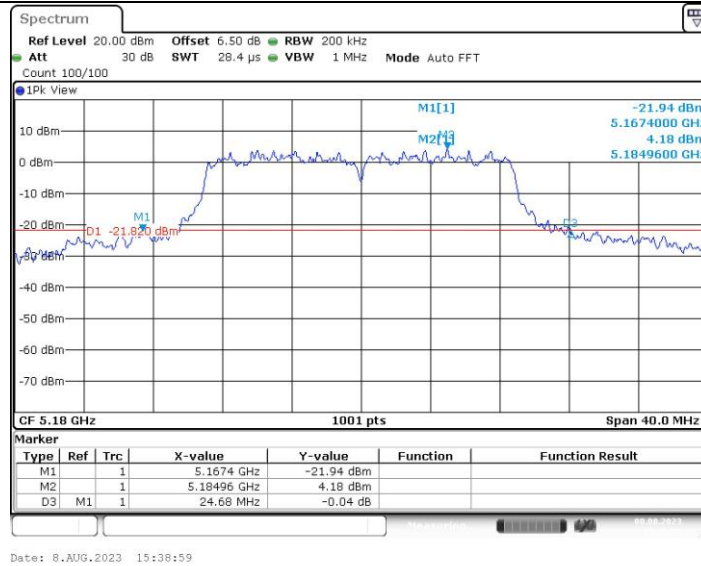
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CTC Laboratories, Inc.

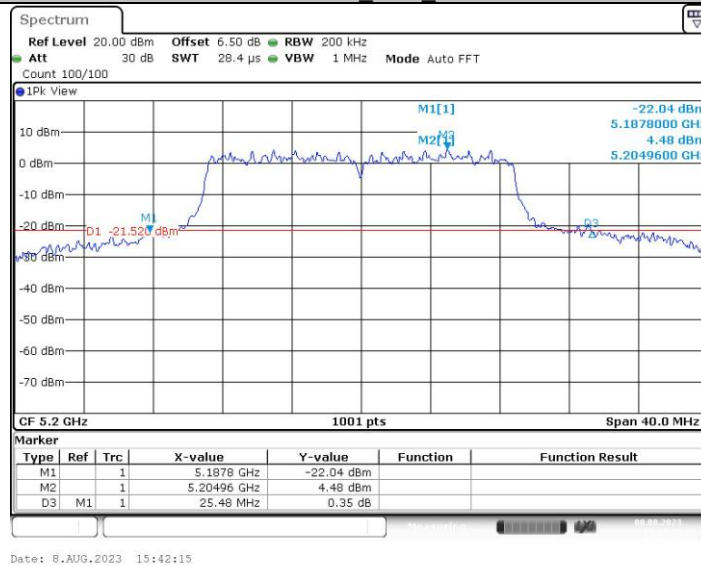
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



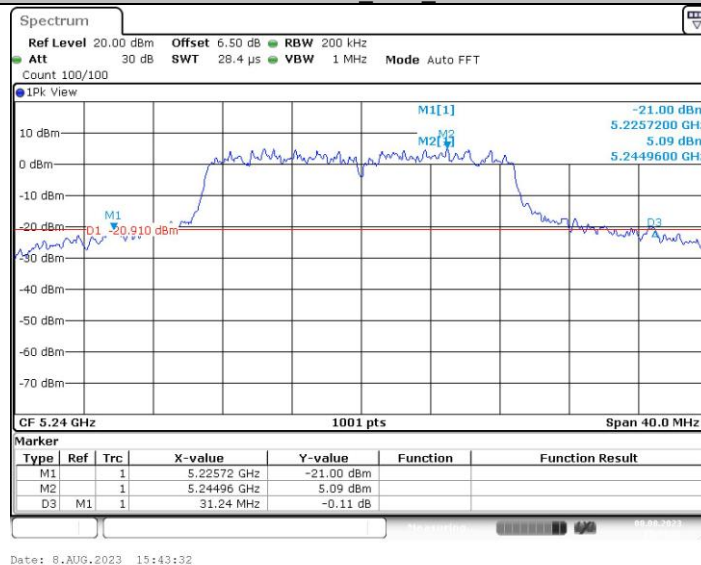
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11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



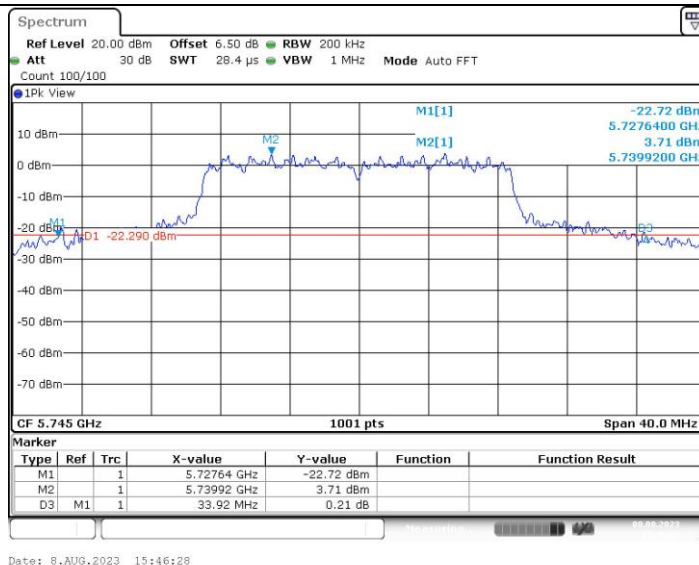
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CTC Laboratories, Inc.

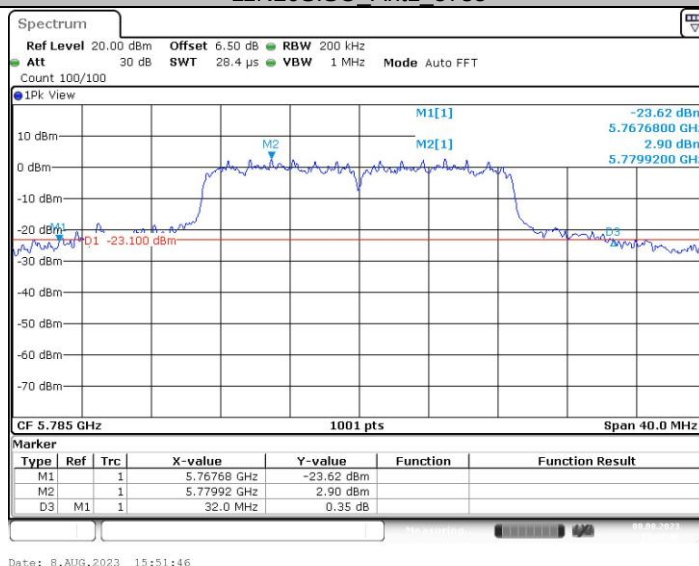
Room 101 Building B, No. 7, Lanqing 1st Road, Luhua Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



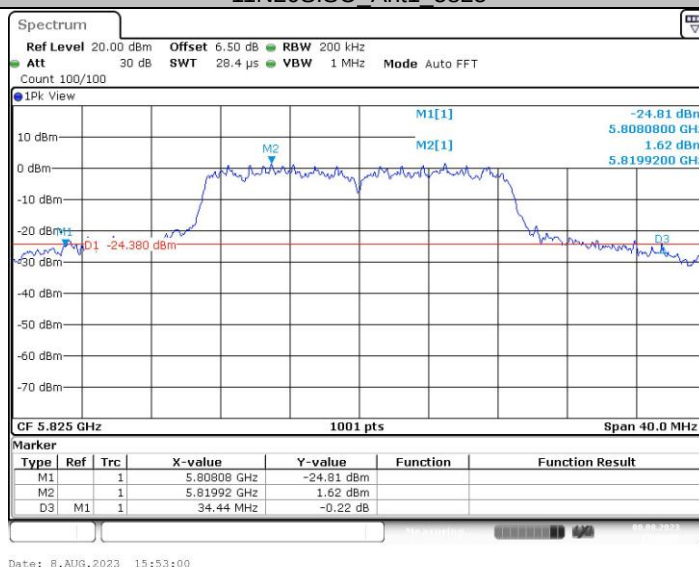
For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : <http://yz.cnca.cn>



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



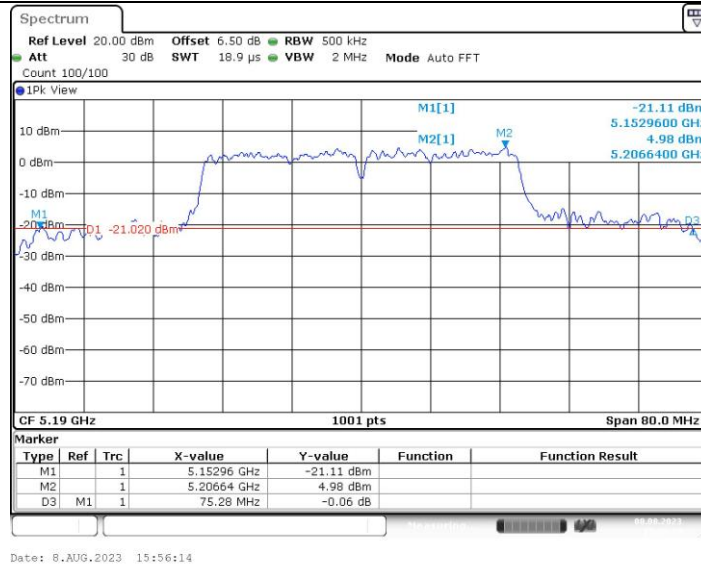
11N40SISO_Ant1_5190

CTC Laboratories, Inc.

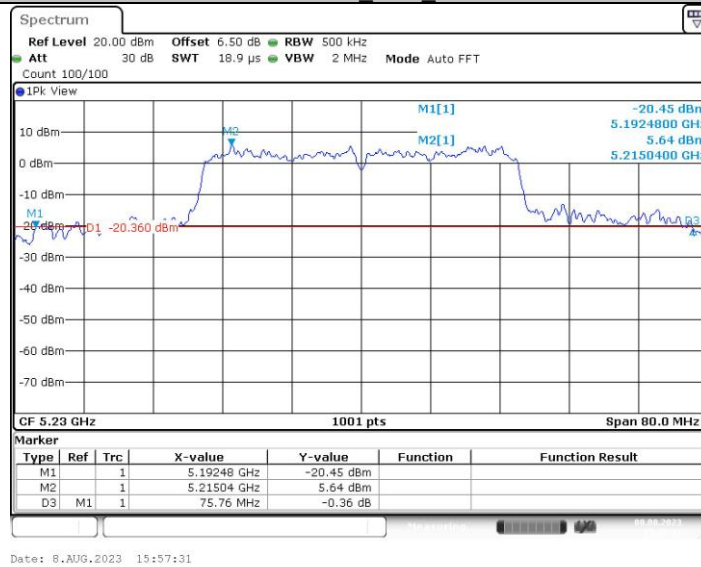
Room 101 Building B, No. 7, Lanqing 1st Road, Luhua Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



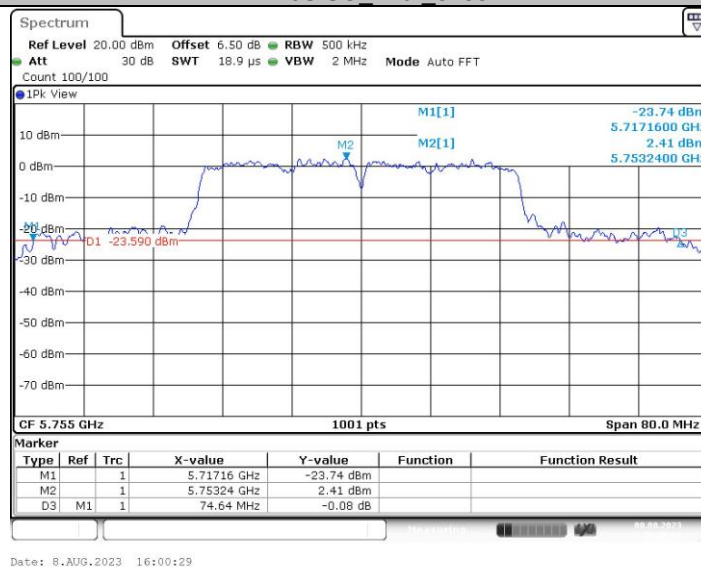
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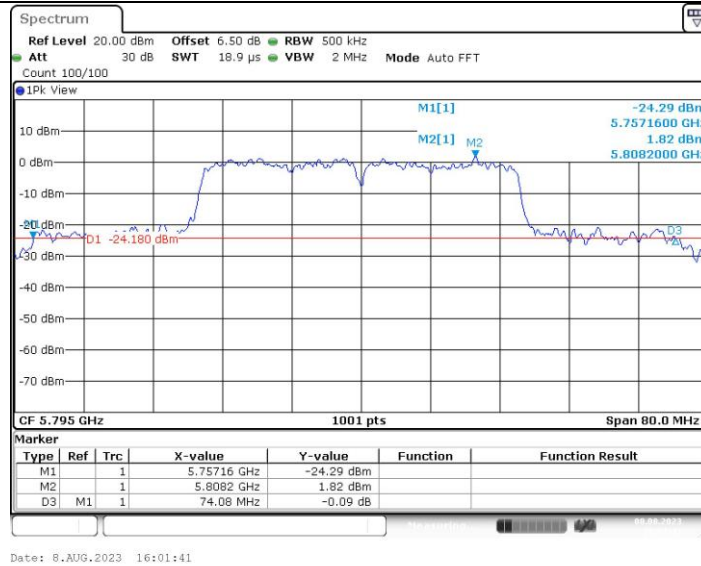
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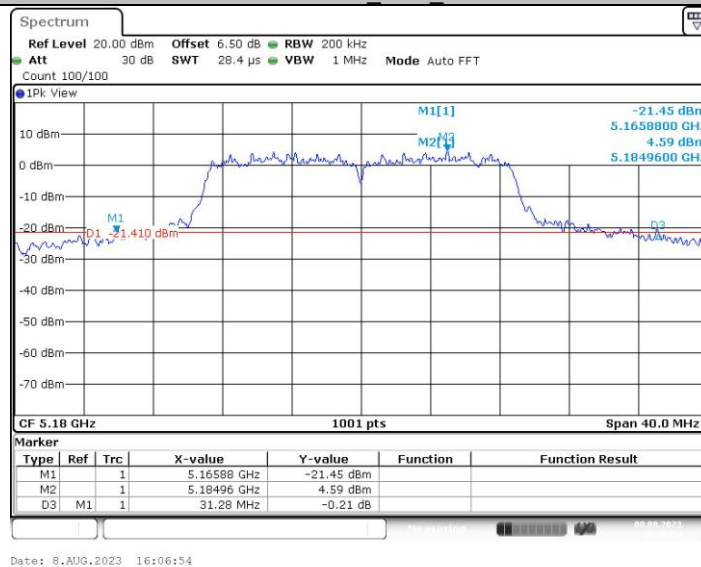
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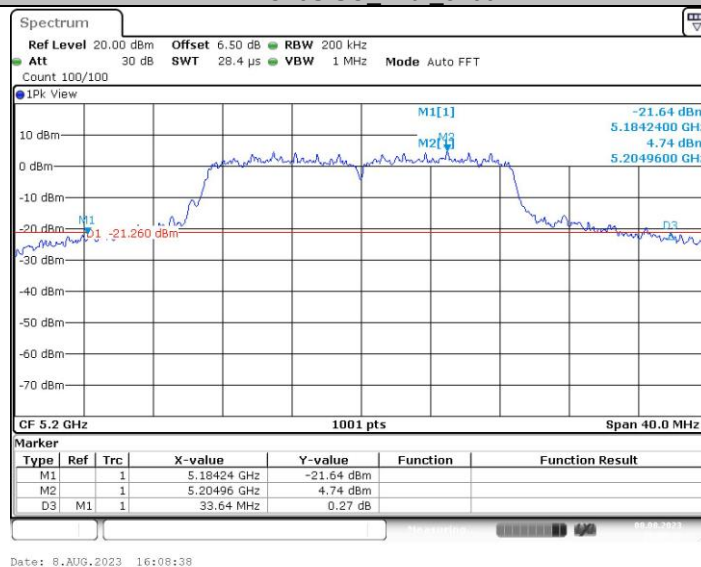
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



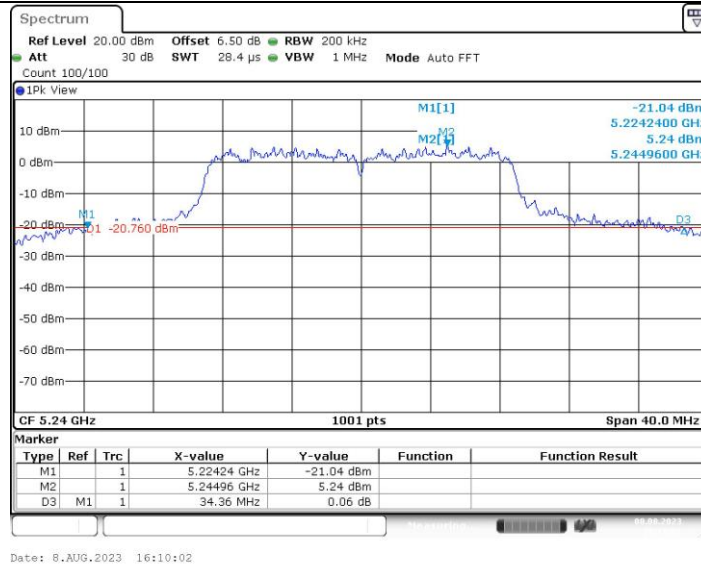
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CTC Laboratories, Inc.

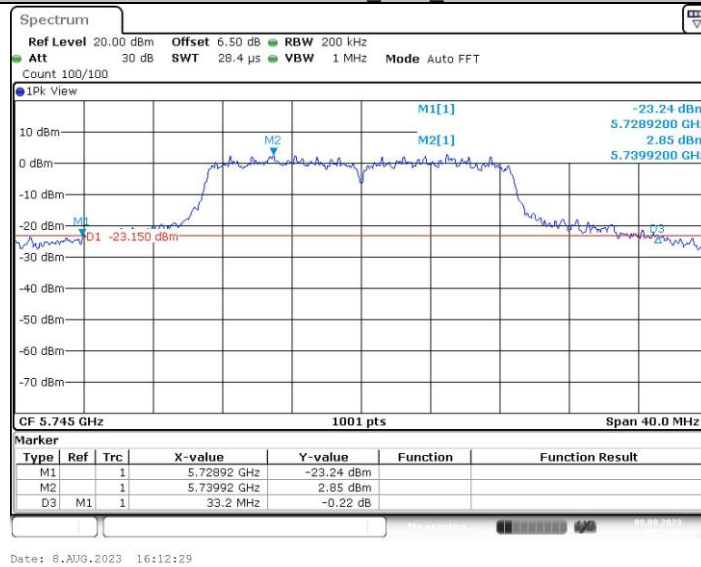
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



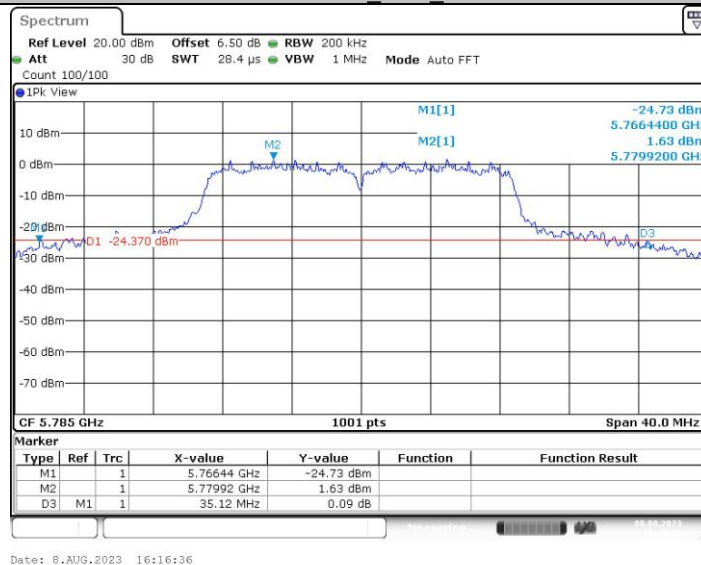
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11AC20SISO_Ant1_5745



11AC20SISO_Ant1_5785



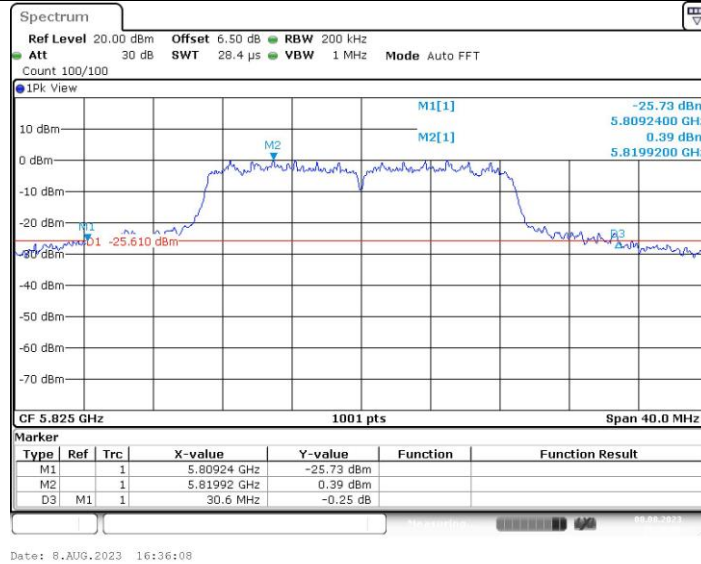
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CTC Laboratories, Inc.

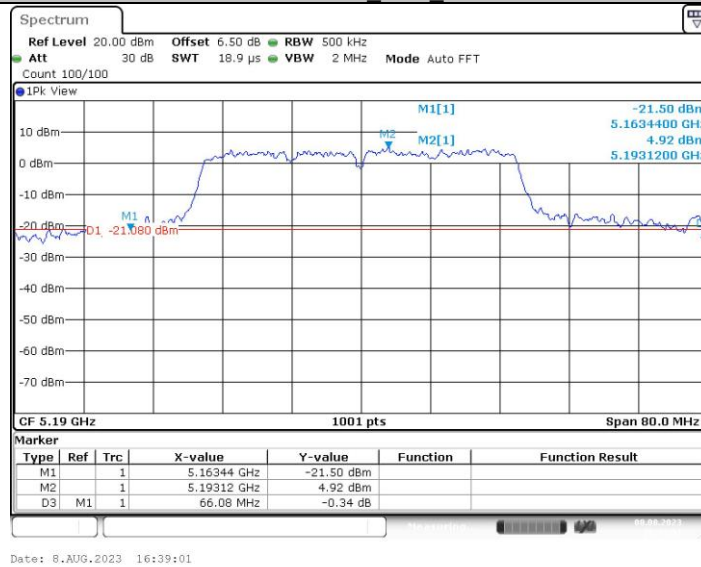
Room 101 Building B, No. 7, Lanqing 1st Road, Luhua Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



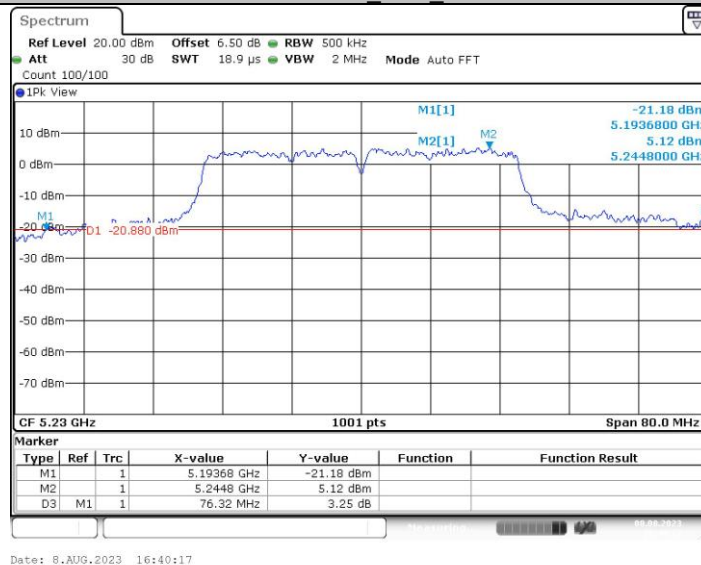
For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : <http://yz.cnca.cn>



11AC40SISO_Ant1_5190



11AC40SISO_Ant1_5230



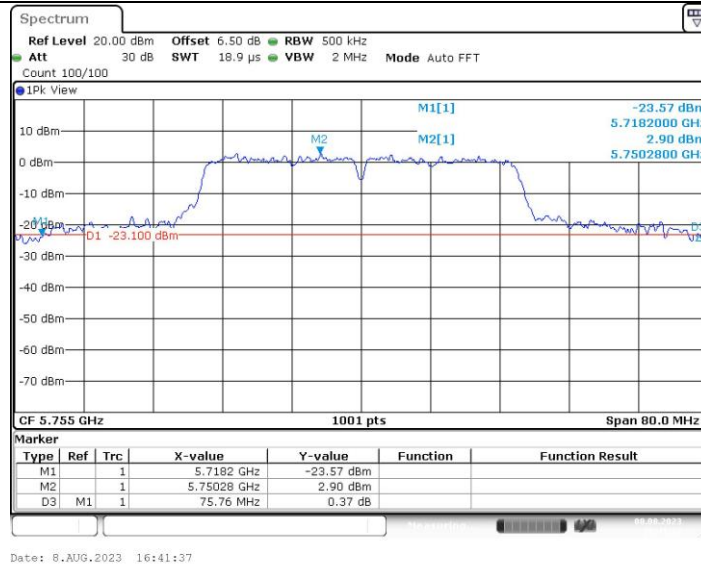
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CTC Laboratories, Inc.

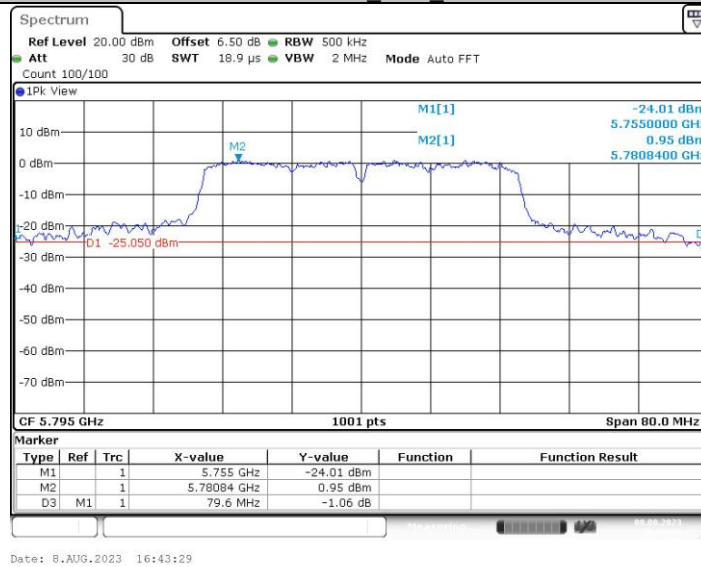
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



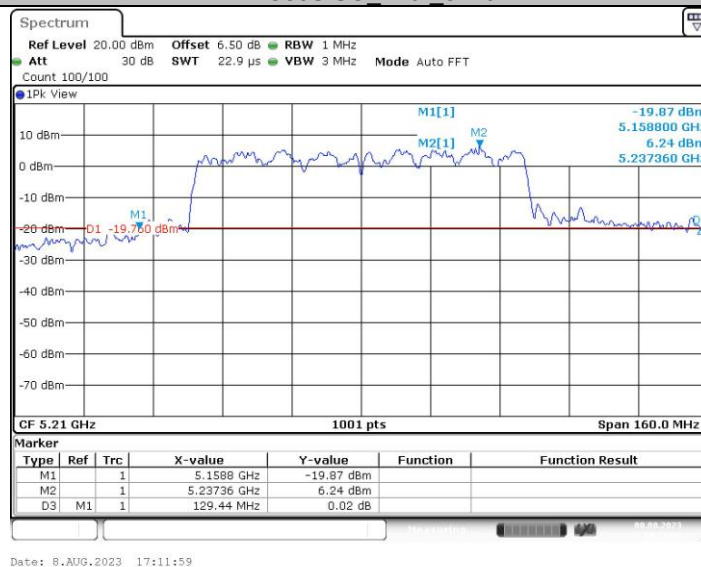
For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : <http://yz.cnca.cn>



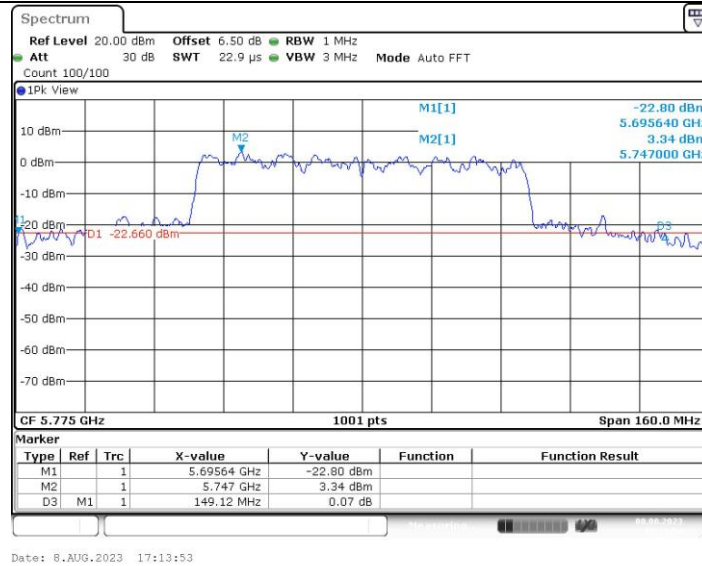
11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5210



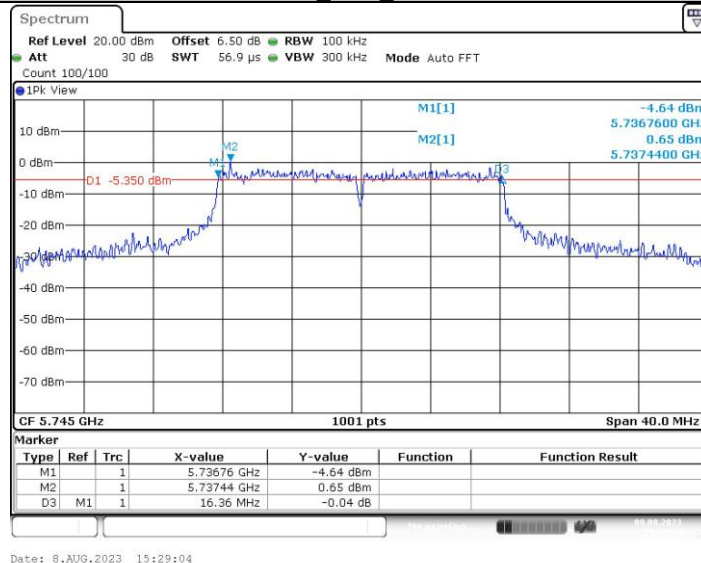
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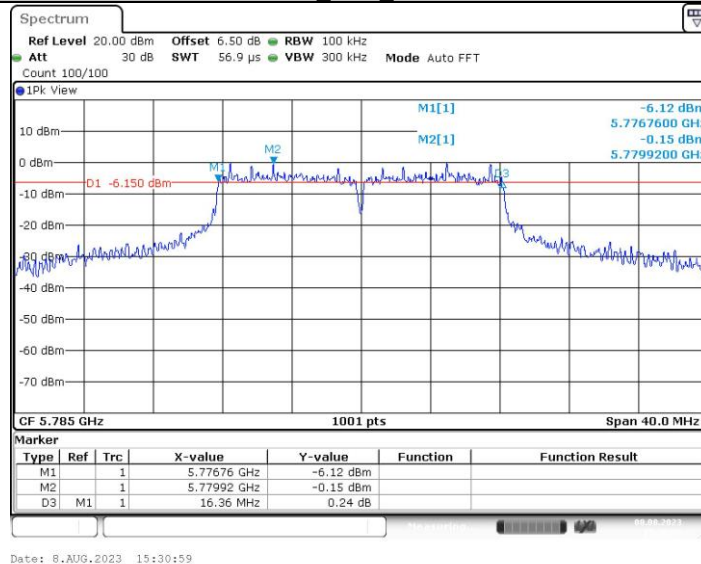


6dB Bandwidth:

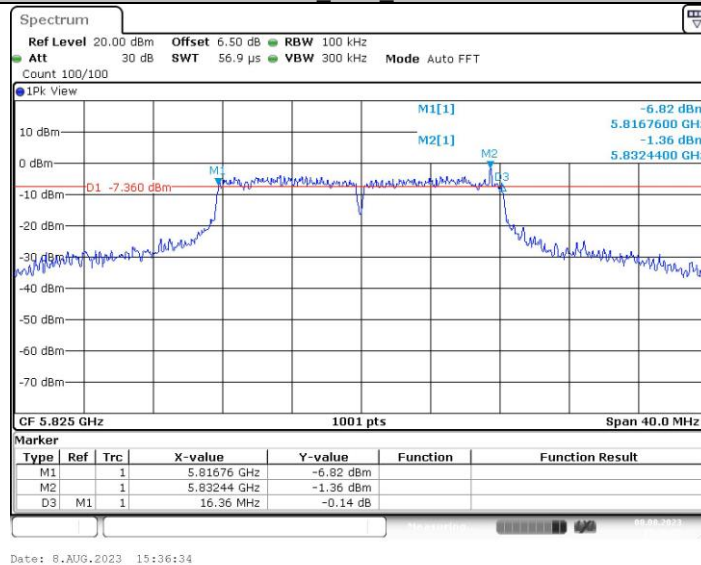
11A Ant1 5745



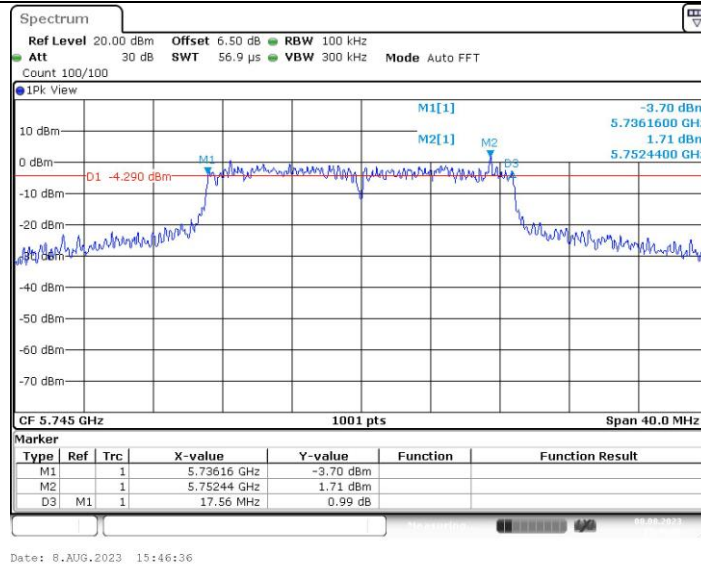
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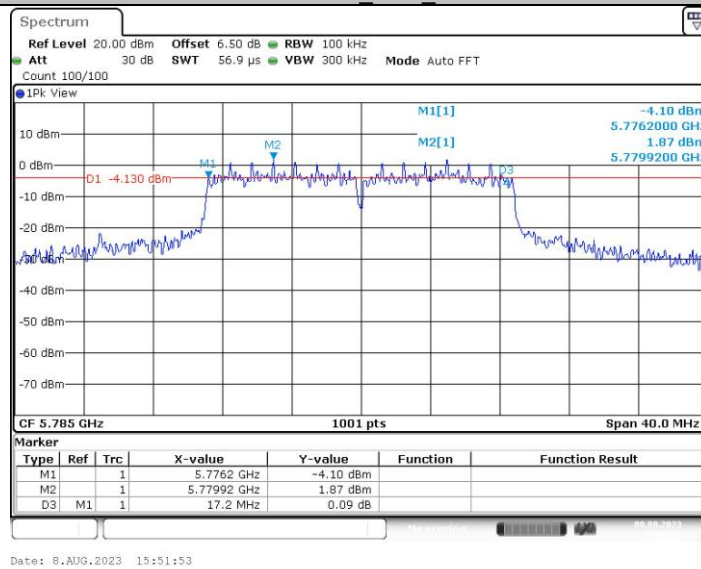
11A Ant1 5825



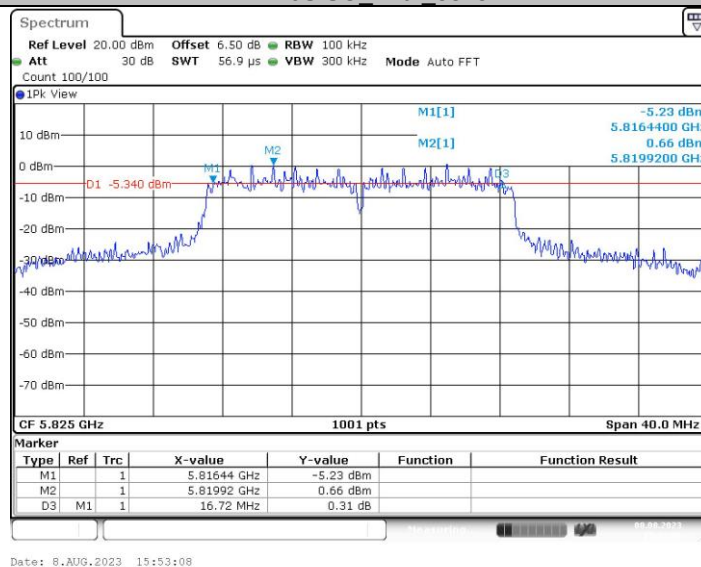
11N20SISO Ant1 5745



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



11N40SISO_Ant1_5755

CTC Laboratories, Inc.

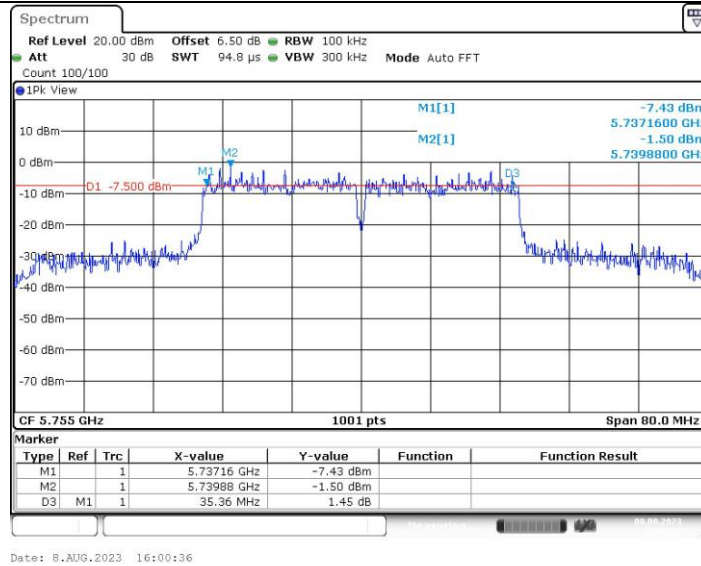
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China

Tel.: (86)755-27521059

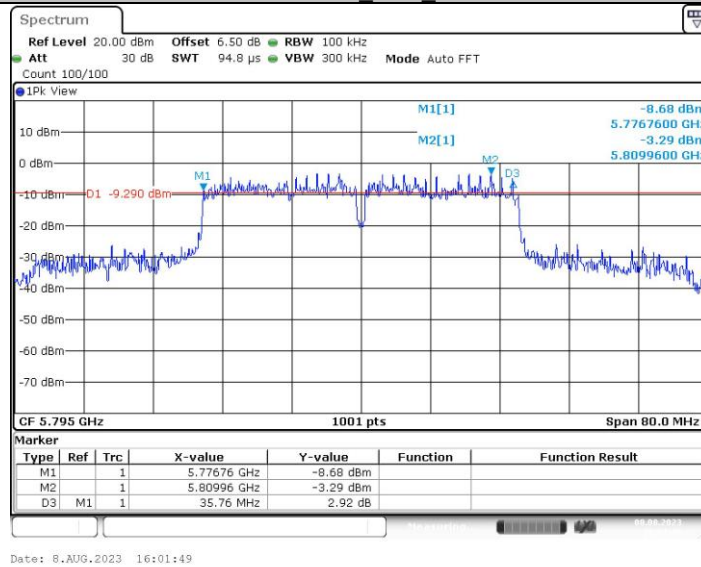
Fax: (86)755-27521011

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

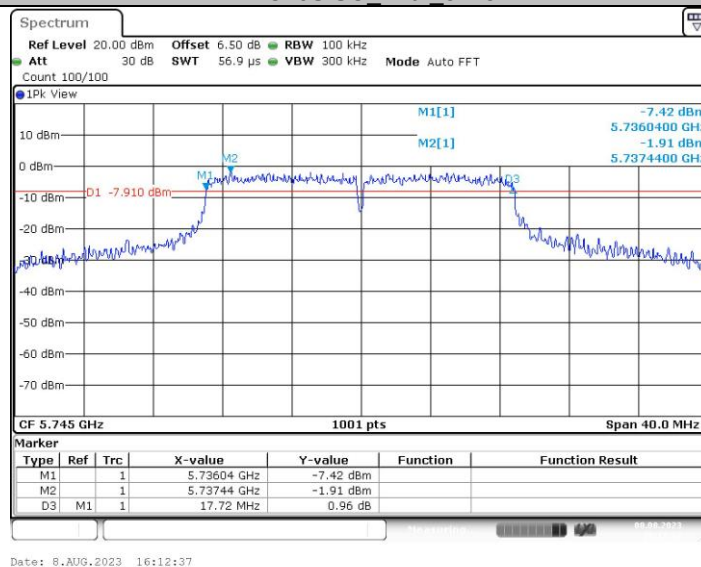
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11N40SISO_Ant1_5795



11AC20SISO_Ant1_5745



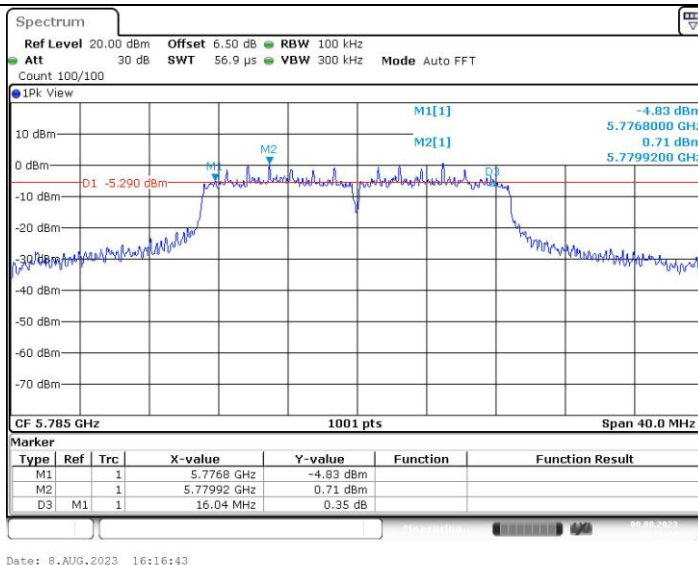
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CTC Laboratories, Inc.

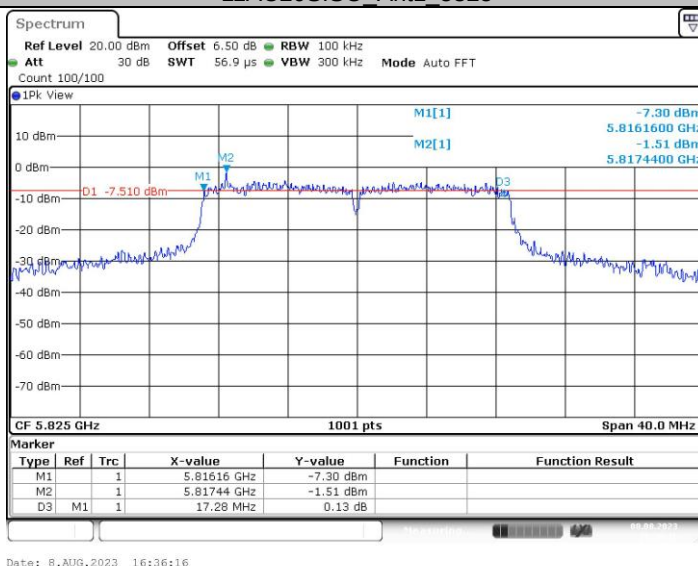
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



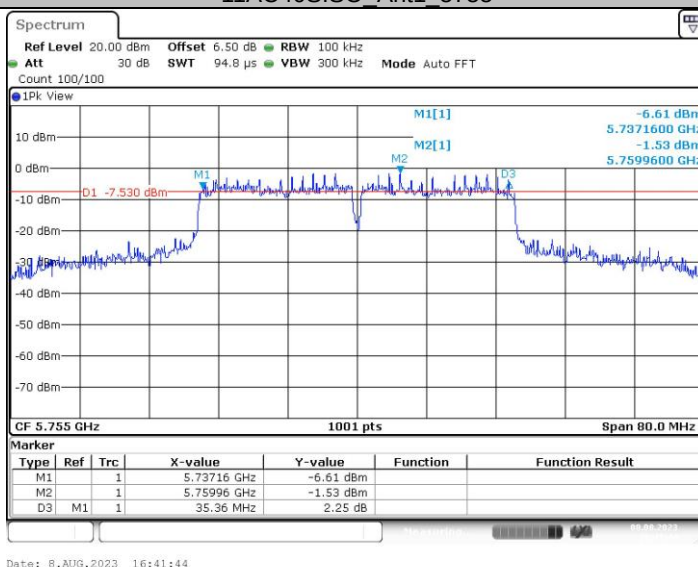
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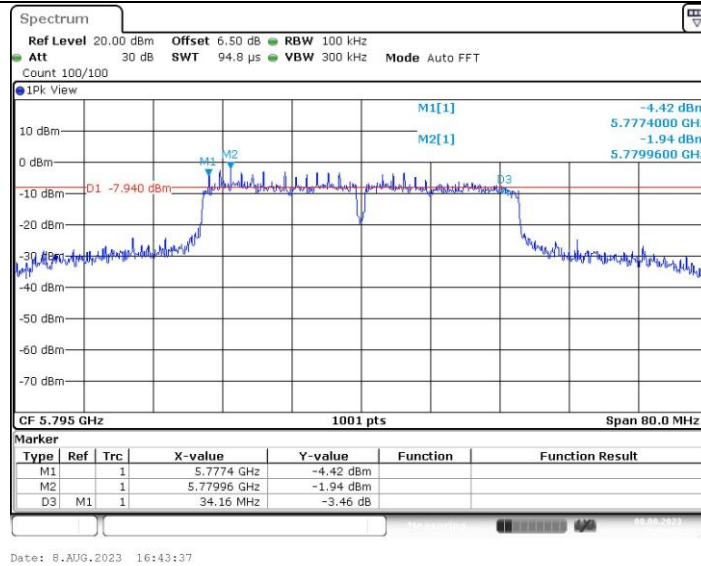
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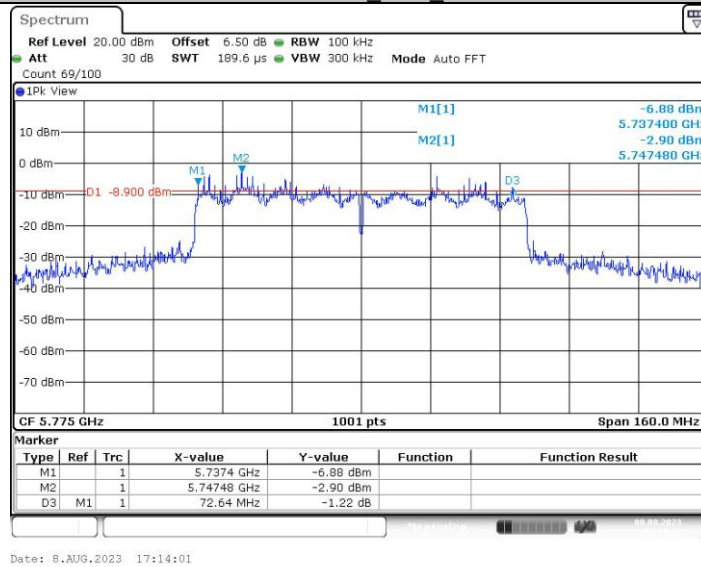
11AC40SISO_Ant1_5755



11AC40SISO_Ant1_5795



11AC80SISO_Ant1_5775





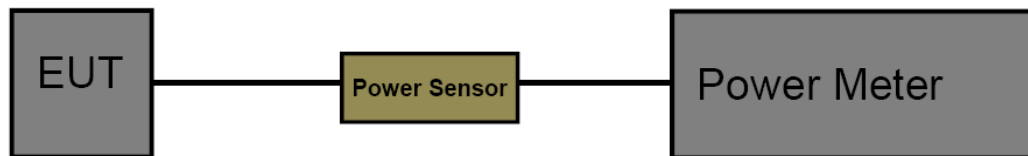
3.5. Peak Output Power

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(a)

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 2.4.

**Test Result**

Test Mode	Antenna	Freq(MHz)	Result [dBm]	Limit [dBm]	Verdict
11A	Ant1	5180	14.44	≤23.98	PASS
		5200	14.69	≤23.98	PASS
		5240	14.42	≤23.98	PASS
		5745	12.41	≤30.00	PASS
		5785	12.28	≤30.00	PASS
		5825	10.39	≤30.00	PASS
11N20SISO	Ant1	5180	14.92	≤23.98	PASS
		5200	15.03	≤23.98	PASS
		5240	15.57	≤23.98	PASS
		5745	14.39	≤30.00	PASS
		5785	13.29	≤30.00	PASS
		5825	11.63	≤30.00	PASS
11N40SISO	Ant1	5190	14.01	≤23.98	PASS
		5230	15.91	≤23.98	PASS
		5755	12.83	≤30.00	PASS
		5795	11.78	≤30.00	PASS
11AC20SISO	Ant1	5180	14.25	≤23.98	PASS
		5200	14.48	≤23.98	PASS
		5240	15.04	≤23.98	PASS
		5745	12.66	≤30.00	PASS
		5785	11.30	≤30.00	PASS
		5825	10.11	≤30.00	PASS
11AC40SISO	Ant1	5190	15.17	≤23.98	PASS
		5230	15.52	≤23.98	PASS
		5755	12.79	≤30.00	PASS
		5795	11.75	≤30.00	PASS
11AC80SISO	Ant1	5210	15.34	≤23.98	PASS
		5775	12.27	≤30.00	PASS



3.6. Power Spectral Density

Limit

FCC CFR Title 47 Part 15 Subpart E Section 15.407(a)

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:

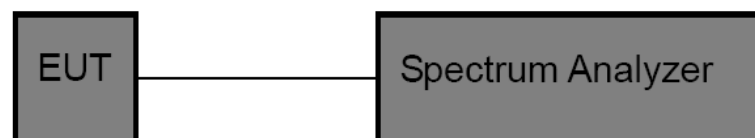
The peak power spectral density (PSD) shall not exceed the lesser of 11dBm/MHz.
If $G_{Tx} > 6\text{dBi}$, then $\text{PSD} = 11 - (G_{Tx} - 6)$.

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: ≥ 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

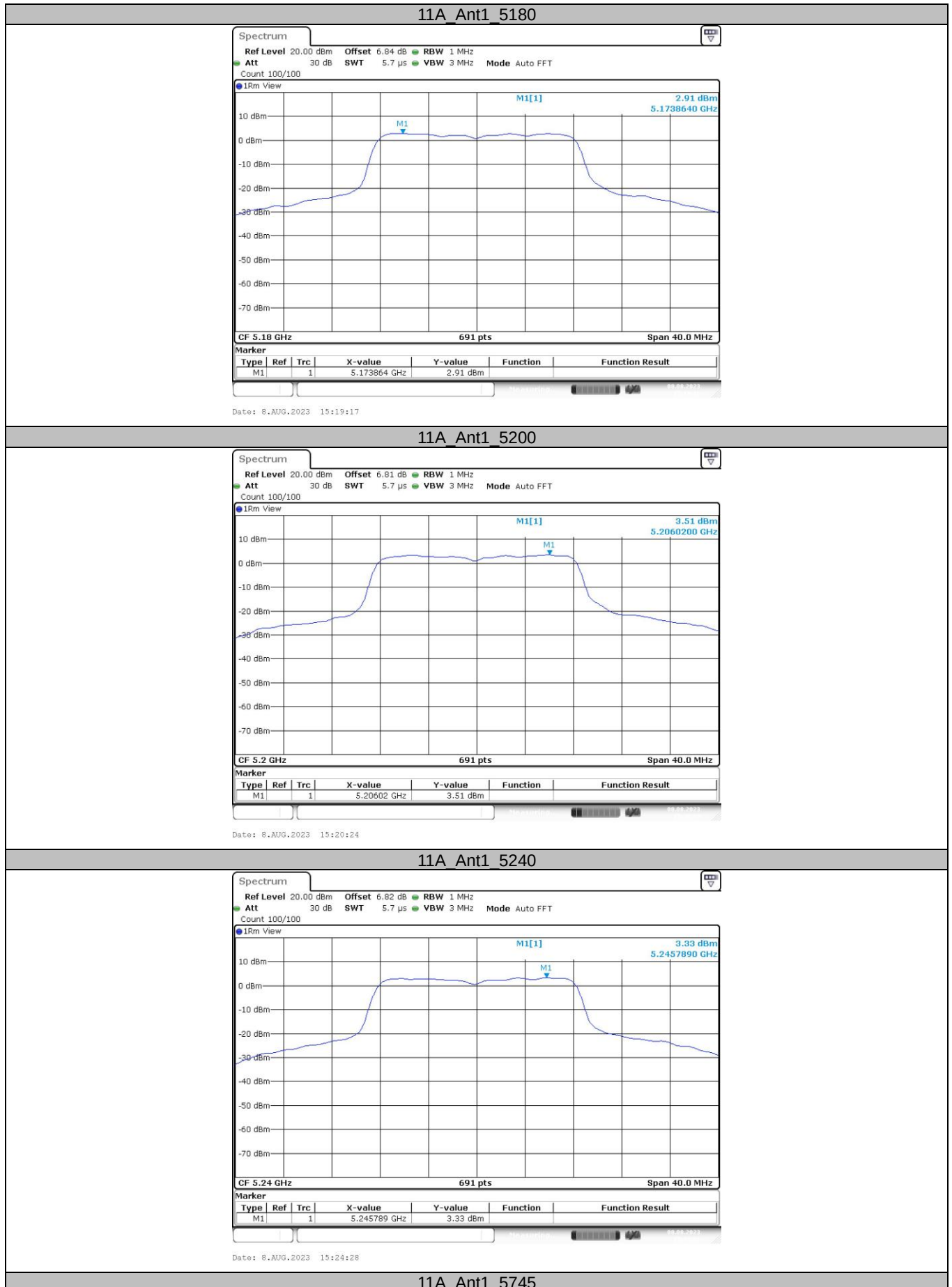
Please refer to the clause 2.4.

Test Result

TestMode	Antenna	Freq(MHz)	Result [dBm/MHz]	Limit[dBm/MHz]	Verdict
11A	Ant1	5180	2.91	≤ 30.00	PASS
		5200	3.51	≤ 30.00	PASS
		5240	3.33	≤ 30.00	PASS
		5745	-1.55	≤ 30.00	PASS
		5785	-1.68	≤ 30.00	PASS
		5825	-3.61	≤ 30.00	PASS
11N20SISO	Ant1	5180	3.97	≤ 30.00	PASS
		5200	3.6	≤ 30.00	PASS
		5240	4.63	≤ 30.00	PASS
		5745	0.48	≤ 30.00	PASS
		5785	-0.19	≤ 30.00	PASS
		5825	-2.24	≤ 30.00	PASS
11N40SISO	Ant1	5190	2.13	≤ 30.00	PASS
		5230	2.34	≤ 30.00	PASS
		5755	-3.82	≤ 30.00	PASS
		5795	-4.96	≤ 30.00	PASS
11AC20SISO	Ant1	5180	3.14	≤ 30.00	PASS
		5200	2.88	≤ 30.00	PASS
		5240	3.76	≤ 30.00	PASS
		5745	-1.22	≤ 30.00	PASS
		5785	-3.01	≤ 30.00	PASS
		5825	-4.18	≤ 30.00	PASS
11AC40SISO	Ant1	5190	1.14	≤ 30.00	PASS
		5230	1.29	≤ 30.00	PASS
		5755	-4.26	≤ 30.00	PASS
		5795	-5.46	≤ 30.00	PASS
11AC80SISO	Ant1	5210	-0.47	≤ 30.00	PASS
		5775	-5.47	≤ 30.00	PASS



Test plot as follows:



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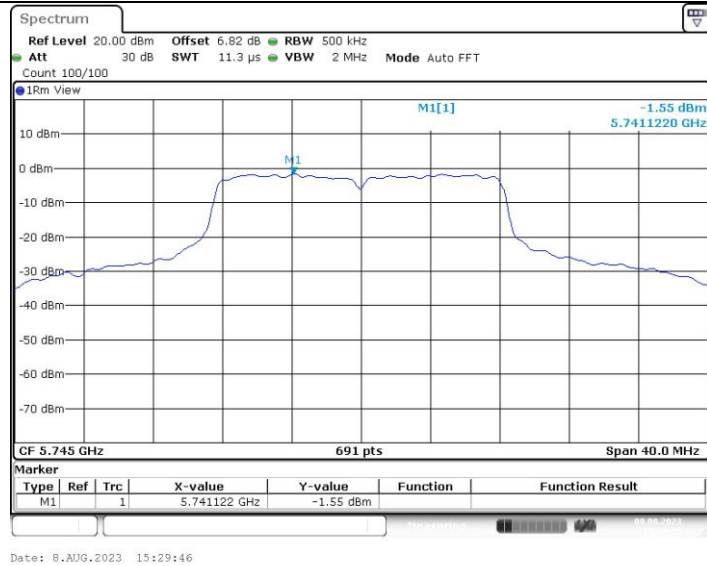
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China

Tel.: (86)755-27521059

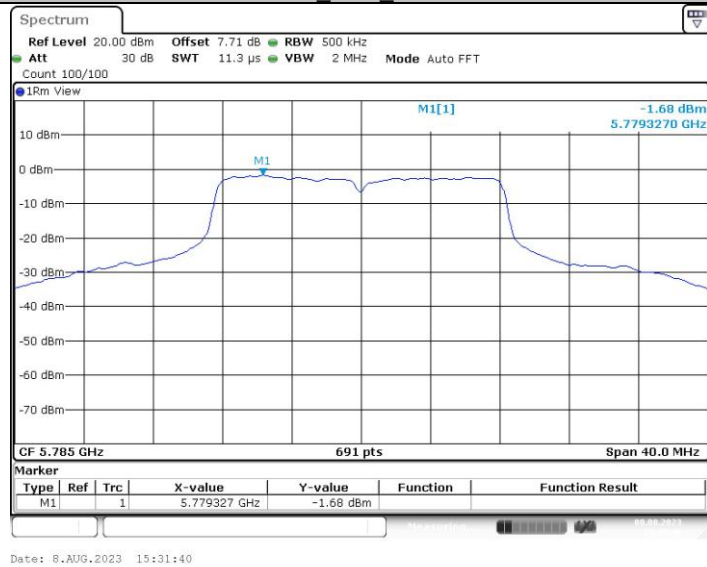
Fax: (86)755-27521011

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

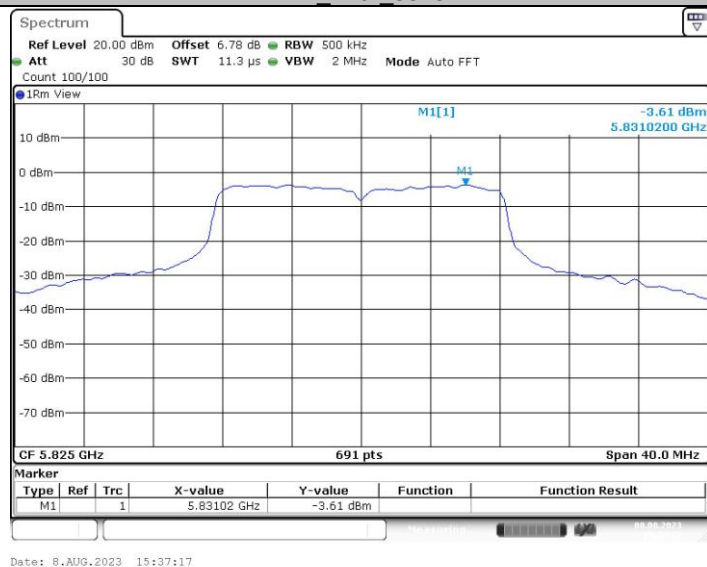
For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : <http://yz.cnca.cn>



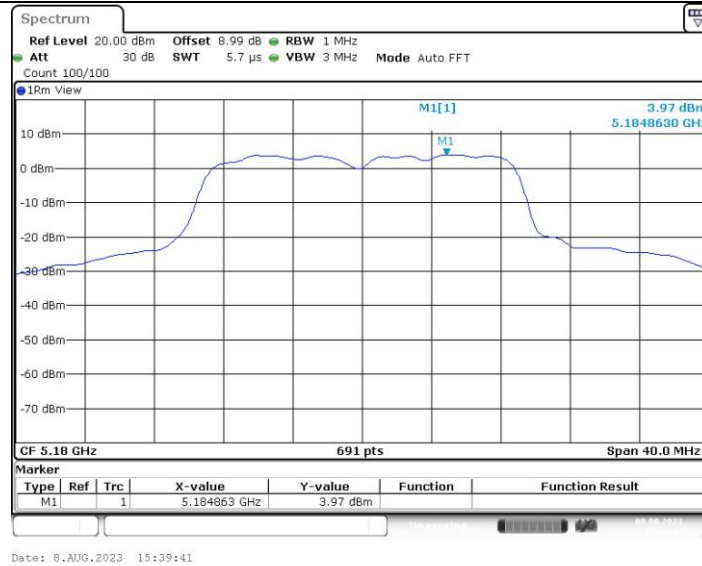
11A_Ant1_5785



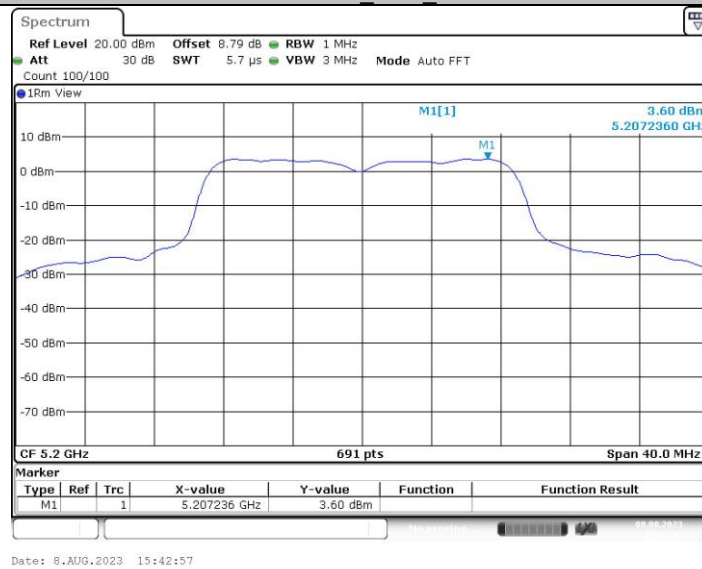
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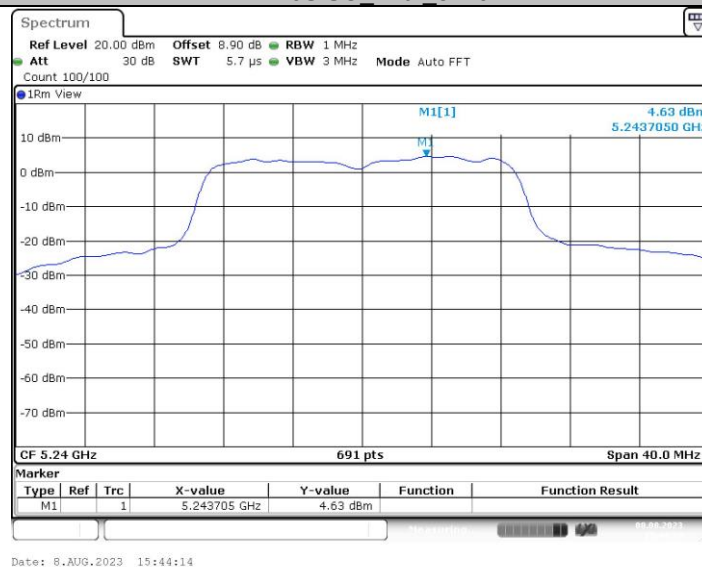
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11N20SISO_Ant1_5200



11N20SISO_Ant1_5240



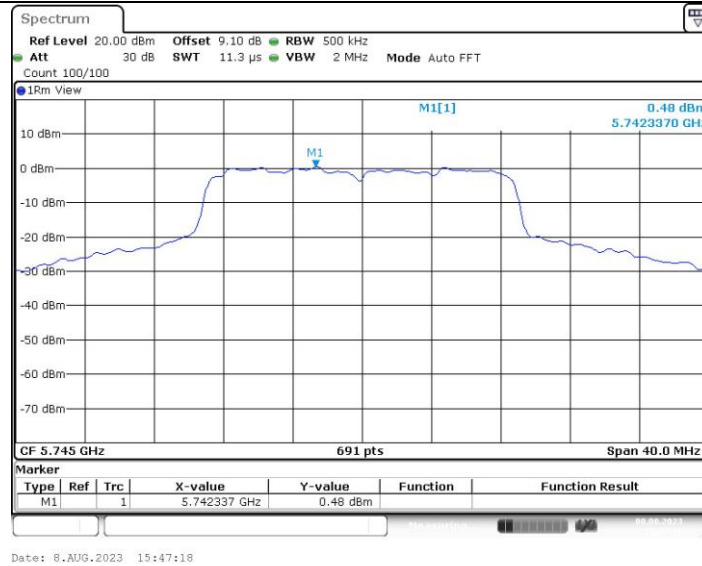
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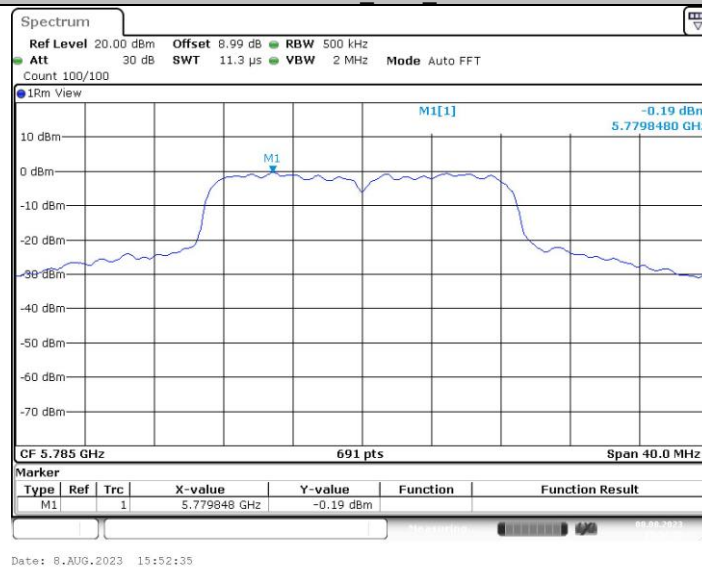
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



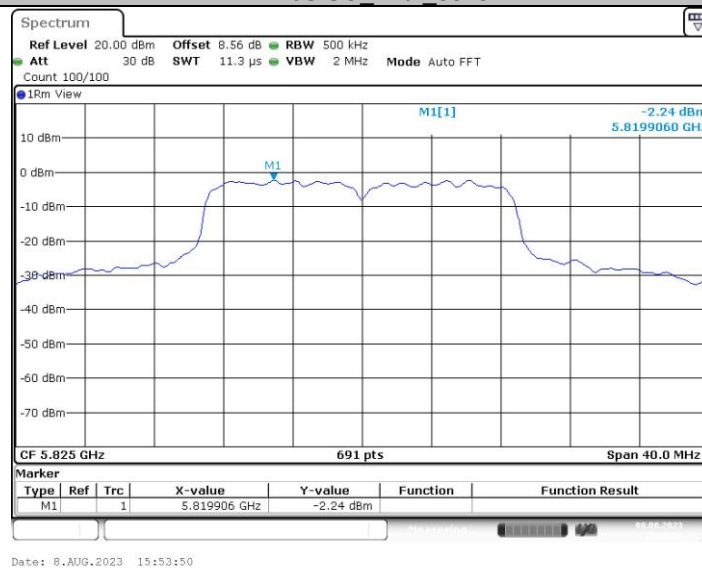
For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : <http://yz.cnca.cn>



11N20SISO_Ant1_5785



11N20SISO_Ant1_5825



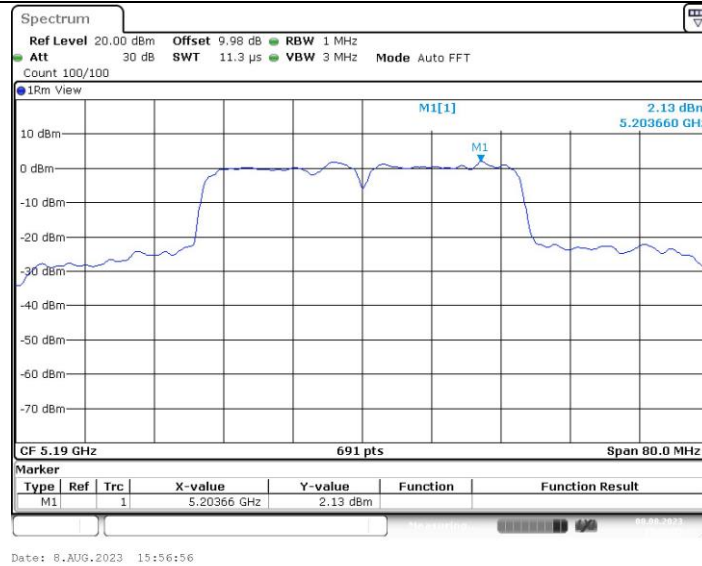
11N40SISO_Ant1_5190

CTC Laboratories, Inc.

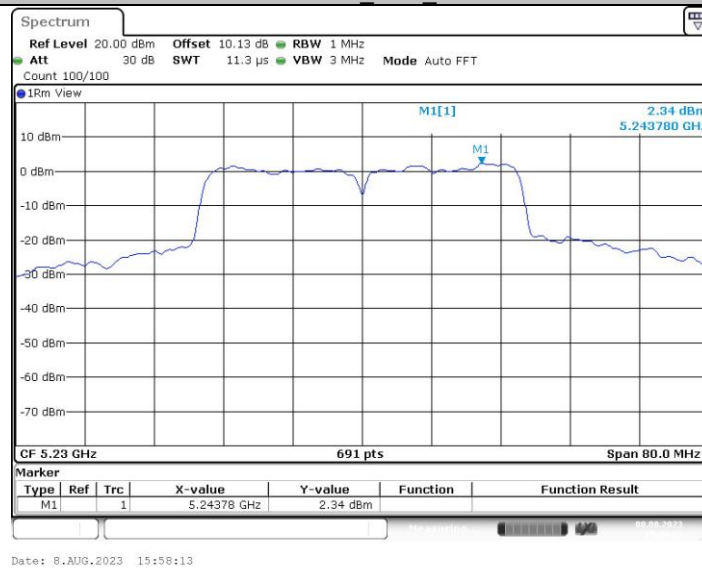
Room 101 Building B, No. 7, Lanqing 1st Road, Luhu Community, Guanhu Subdistrict, Longhua District, Shenzhen, Guangdong, China
Tel.: (86)755-27521059 Fax: (86)755-27521011 Http://www.sz-ctc.org.cn



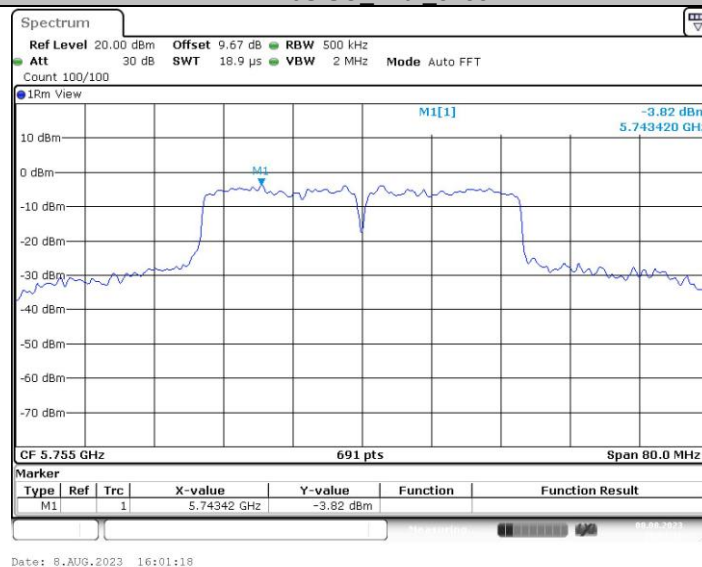
For anti-fake verification, please visit the official website of Certification and Accreditation Administration of the People's Republic of China : <http://yz.cnca.cn>



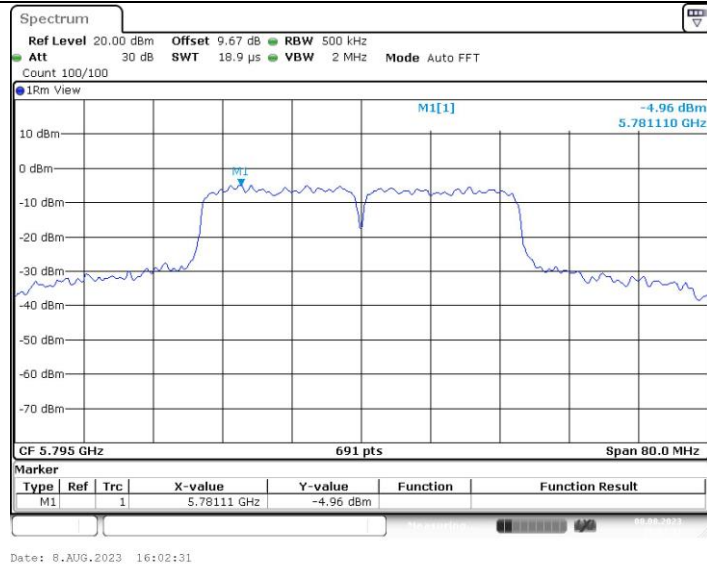
11N40SISO_Ant1_5230



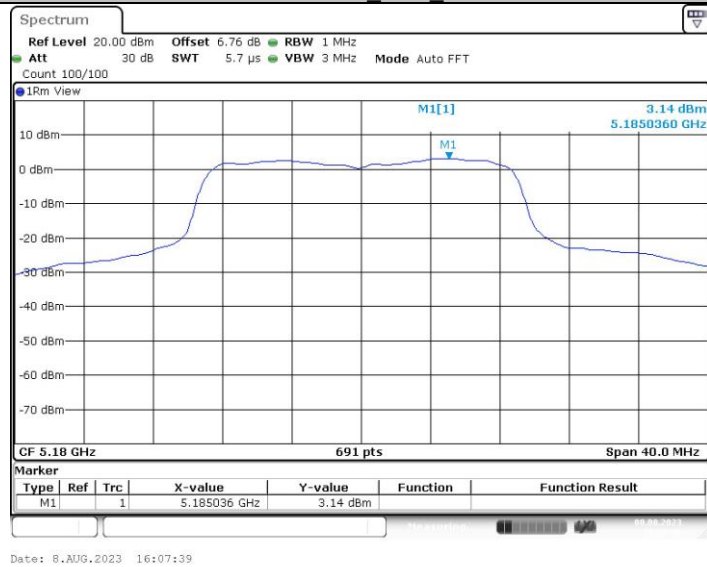
11N40SISO_Ant1_5755



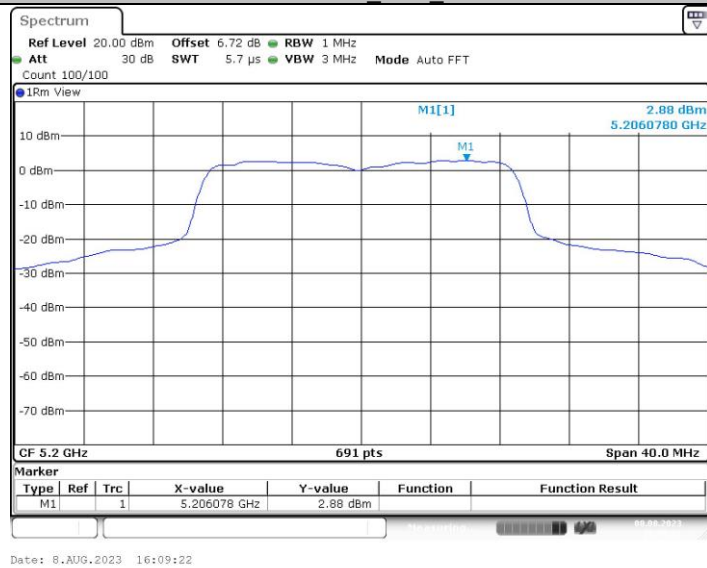
11N40SISO_Ant1_5795



11AC20SISO_Ant1_5180



11AC20SISO_Ant1_5200



11AC20SISO_Ant1_5240