

FCC CERTIFICATION TEST REPORT

FOR

Applicant	:	Harman International Industries, Inc.
Address	:	8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES
Equipment under Test	:	Wireless Speaker
Model No.	:	CITATION 200
Trade Mark	:	harman/kardon
FCC ID	:	APIHKCT200
Manufacturer	:	Harman International Industries, Inc.
Address	:	8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES

Issued By: Dongguan Dongdian Testing Service Co., Ltd.

Add.: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park,

Dongguan City, Guangdong Province, China, 523808

Tel.: +86-0769-38826678, **E-mail:** ddt@dgddt.com, <http://www.dgddt.com>

REPORT

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Test Report Declare

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Equipment under Test	:	Wireless Speaker
Model No	:	CITATION 200
Trade Mark	:	harman/kardon
Manufacturer	:	Harman International Industries, Inc.
Address	:	8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES

Test Standard Used: FCC Rules and Regulations Part 15 Subpart E.

Test procedure used: ANSI C63.10:2013, 789033 D02 General U-NII Test Procedures New Rules v02r01

We Declare:

The equipment described above is tested by Dongguan Dongdian Testing Service Co., Ltd and in the configuration tested the equipment complied with the standards specified above. The test results are contained in this test report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these tests.

After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above FCC standards.

Report No:	DDT-R20032021-1E12		
Date of Receipt:	Apr. 20, 2020	Date of Test:	Apr. 20, 2020 ~ Jun. 28, 2020

Prepared By:

Sam Li
Sam Li/Engineer

Approved By:


Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Jun. 28, 2020	

1. Summary of Test Results

The EUT have been tested according to the applicable standards as referenced below.

Description of Test Item	Standard	Results
6/26 dB Bandwidth and 99% Bandwidth	FCC 15.407 (e)	PASS
Maximum Conducted Output Power	FCC 15.407 (a)	PASS
Power Spectral Density	FCC 15.407 (a)	PASS
Frequency Stability Measurement	FCC 15.407 (g)	PASS
Spurious Emissions	FCC 15.407 (b) FCC 15.209	PASS
Band Edge Compliance	FCC 15.407 (b) FCC 15.209 FCC 15.205	PASS
Power Line Conducted Emission	FCC 15.207	PASS
Antenna requirement	FCC 15.203	PASS
Dynamic Frequency Selection	FCC 15.407 (h)	PASS

2. General Test Information

2.1. Description of EUT

EUT* Name	: Wireless Speaker
Model Number	: CITATION 200
EUT function description	: Please reference user manual of this device
Power supply	: DC 19V from external charging cradle : DC 5V from external AC Adapter : DC 3.6V Polymer Li-ion built-in battery
Radio Technology	: IEEE 802.11a/n/ac
Operation frequency	: IEEE 802.11a: 5180 MHz - 5240 MHz, 5260 MHz - 5320 MHz, 5500 MHz - 5700 MHz, 5745 MHz - 5825 MHz : IEEE 802.11n HT20: 5180 MHz - 5240 MHz, 5260 MHz - 5320 MHz, 5500 MHz - 5700 MHz, 5745 MHz - 5825 MHz : IEEE 802.11n HT40: 5190 MHz - 5230 MHz, 5270 MHz - 5310 MHz, 5510 MHz - 5670 MHz, 5755 MHz - 5795 MHz : IEEE 802.11ac HT20: 5180 MHz - 5240 MHz, 5260 MHz - 5320 MHz, 5500 MHz - 5700 MHz, 5745 MHz - 5825 MHz : IEEE 802.11ac HT40: 5190 MHz - 5230 MHz, 5270 MHz - 5310 MHz, 5510 MHz - 5670 MHz, 5755 MHz - 5795 MHz : IEEE 802.11ac HT80: 5210 MHz, 5290 MHz, 5530 MHz, 5610 MHz, 5775 MHz
Modulation	: IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) : IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK, BPSK) : IEEE 802.11ac: OFDM (256QAM, 64QAM, 16QAM, QPSK, BPSK)
Transmitter rate	: IEEE 802.11a: 6, 9, 12, 18, 24, 36, 48, 54 Mbps : IEEE 802.11n HT20: 14.4, 28.9, 43.3, 57.8, 86.7, 115.6, 130.0, 144.4 Mbps : IEEE 802.11n HT40: 30, 60, 90, 120, 180, 240, 270, 300 Mbps : IEEE 802.11ac HT20: 14.4, 28.8, 43.4, 57.8, 86.6, 115.6, 130, 144.4, 173.4 Mbps : IEEE 802.11ac HT40: 30, 60, 90, 120, 180, 240, 270, 300, 360, 400 Mbps : IEEE 802.11ac HT80: 65, 130, 195, 260, 390, 520, 585, 650, 780, 866.6 Mbps
Antenna Type	: Antenna 1: Dedicated FPCB antenna, maximum PK gain: 3.76 dBi : Antenna 2: Dedicated FPCB antenna, maximum PK gain: 3.25 dBi
Sample Type	: Series production

Note: EUT is the ab. of equipment under test.

2.2. Accessories of EUT

Description of Accessories	Manufacturer	Model number	Description	Remark
AC cable	N/A	N/A	N/A	Length: 1.80m, unshielded
Charging cradle	harman/kardon	N/A	N/A	Input: 100-240V~ 50/60Hz, 1.5A; Output: DC 19V/3A, 57W
Built-in Battery	ICON ENERGY SYSTEM (SHENZHEN) CO., LTD	IAA031NA	DC3.6V, 4800mAh, 17.28Wh	N/A

2.3. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	EMC Compliance	SN
Notebook	Lenovo Beijing Co. Ltd.	ThinkPad	FCC/CE	TP00015A
Wireless LAN Access Point	HUAWEI	AP6050	21500829352SC5000371	FCC ID: QISAP6050DN6150DN

2.4. Block diagram of EUT configuration for test

EUT

Test software: adb.EXE

The test software was used to control EUT work in Continuous Tx mode, and select test channel, wireless mode as below table.

Tested mode, channel, and data rate information				
Mode	Setting Tx Power	data rate (Mbps) (see Note)	Channel	Frequency (MHz)
IEEE 802.11a	15	6	Low: CH36	5180
	15	6	Middle: CH40	5200
	15	6	High: CH48	5240
	15	6	Low: CH52	5260
	15	6	Middle: CH56	5280
	15	6	High: CH64	5320
	15	6	Low: CH100	5500
	15	6	Middle: CH116	5580
	15	6	High: CH140	5700
	15	6	Low: CH149	5745
	15	6	Middle: CH157	5785
	15	6	High: CH165	5825
IEEE 802.11n HT20	15	MCS 0	Low: CH36	5180
	15	MCS 0	Middle: CH40	5200
	15	MCS 0	High: CH48	5240
	15	MCS 0	Low: CH52	5260
	15	MCS 0	Middle: CH56	5280
	15	MCS 0	High: CH64	5320
	15	MCS 0	Low: CH100	5500
	15	MCS 0	Middle: CH116	5580
	15	MCS 0	High: CH140	5700
	15	MCS 0	Low: CH149	5745
	15	MCS 0	Middle: CH157	5785
	15	MCS 0	High: CH165	5825
IEEE 802.11n HT40	12	MCS 0	Low: CH38	5190
	15	MCS 0	Middle: CH46	5230
	15	MCS 0	High: CH54	5270
	13	MCS 0	Low: CH62	5310
	13	MCS 0	Middle: CH102	5510
	15	MCS 0	High: CH110	5550
	15	MCS 0	Low: CH134	5670
	15	MCS 0	Middle: CH151	5755
	15	MCS 0	High: CH159	5795
IEEE 802.11ac HT20	15	MCS 0	Low: CH36	5180
	15	MCS 0	Middle: CH40	5200
	15	MCS 0	High: CH48	5240
	15	MCS 0	Low: CH52	5260
	15	MCS 0	Middle: CH56	5280
	15	MCS 0	High: CH64	5320
	15	MCS 0	Low: CH100	5500
	15	MCS 0	Middle: CH116	5580
	15	MCS 0	High: CH140	5700
	15	MCS 0	Low: CH149	5745
	15	MCS 0	Middle: CH157	5785
	15	MCS 0	High: CH165	5825

IEEE 802.11ac HT40	12	MCS 0	Low: CH38	5190
	15	MCS 0	Middle: CH46	5230
	15	MCS 0	High: CH54	5270
	13	MCS 0	Low: CH62	5310
	13	MCS 0	Middle: CH102	5510
	15	MCS 0	High: CH110	5550
	15	MCS 0	Low: CH134	5670
	15	MCS 0	Middle: CH151	5755
	15	MCS 0	High: CH159	5795
IEEE 802.11ac HT80	11	MCS 0	CH42	5210
	12	MCS 0	CH58	5290
	11	MCS 0	CH106	5530
	15	MCS 0	CH122	5610
	15	MCS 0	CH155	5775
Note: According exploratory test, EUT will have maximum output power in those data rate, so those data rate were used for all test.				

2.5. Deviations of test standard

No Deviation.

2.6. Test environment conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature range:	21-25 °C
Humidity range:	40-75%
Pressure range:	86-106 kPa

2.7. Test laboratory

Dongguan Dongdian Testing Service Co., Ltd

Add.: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com

CNAS Accreditation No. L6451; A2LA Accreditation No. 3870.01

Designation Number: CN1182; Test Firm Registration Number: 540522

Industry Canada site registration number: 10288A-1

2.8. Measurement uncertainty

Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power (Conducted) (Spectrum Analyzer)	0.86 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$);
	1.38 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Peak Output Power (Conducted) (Power Sensor)	0.74 dB
Power Spectral Density	0.74 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$);
	1.38 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
Frequencies Stability	6.7×10^{-8} (Antenna couple method)
	5.5×10^{-8} (Conducted method)
Conducted Spurious Emissions	0.86 dB ($10 \text{ MHz} \leq f < 3.6 \text{ GHz}$);
	1.40 dB ($3.6 \text{ GHz} \leq f < 8 \text{ GHz}$)
	1.66 dB ($8 \text{ GHz} \leq f < 22 \text{ GHz}$)
Uncertainty for Radio Frequency (RBW < 20 kHz)	3×10^{-8}
Temperature	0.4 °C
Humidity	2 %
Uncertainty for Radiation Emission Test (30 MHz - 1 GHz)	4.70 dB (Antenna Polarize: V)
	4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission Test (1 GHz - 40 GHz)	4.10 dB (1 - 6 GHz)
	4.40 dB (6 GHz - 18 GHz)
	3.54 dB (18 GHz - 26 GHz)
	4.30 dB (26 GHz - 40 GHz)
Uncertainty for Power Line Conduction Emission Test	3.32 dB (150 kHz - 30 MHz)

Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

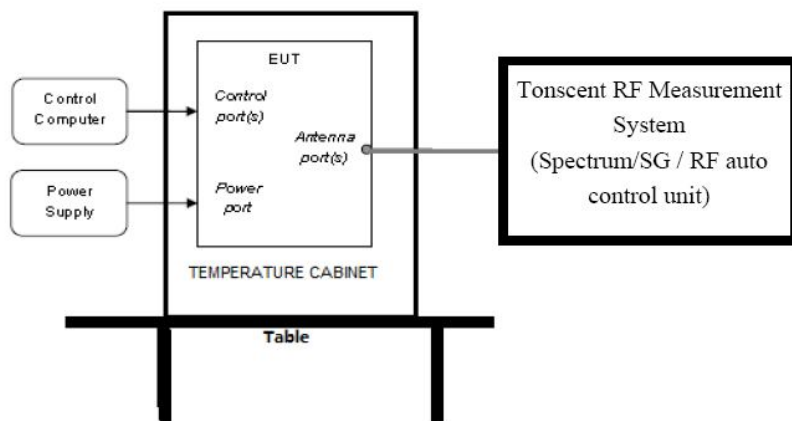
3. Equipment Used During Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
RF Connected Test (Tonscend RF Measurement System)					
Spectrum analyzer	R&S	FSU26	200071	Sep. 29, 2019	1 Year
Wideband Radio Communication tester	R&S	CMW500	117491	Jun. 25, 2019	1 Year
Vector Signal Generator	Agilent	E8267D	US49060192	Sep. 29, 2019	1 Year
Vector Signal Generator	Agilent	N5182A	MY48180737	Jun. 25, 2019	1 Year
Power Sensor	Agilent	U2021XA	MY55150010	Jun. 28, 2019	1 Year
Power Sensor	Agilent	U2021XA	MY55150011	Jun. 28, 2019	1 Year
DC Power Source	MATRIS	MPS-3005L-3	D813058W	Jun. 25, 2019	1 Year
RF Cable	Micable	C10-01-01-1	100309	Sep. 29, 2019	1 Year
Temp&Humi Programmable	ZHIXIANG	ZXGDJS-150L	ZX170110-A	Oct. 21, 2019	1 Year
Test Software	JS Tonscend	JS1120-3	Ver.2.7	N/A	N/A
Radiation 1#chamber					
EMI Test Receiver	R&S	ESU8	100316	Sep. 29, 2019	1 Year
Spectrum analyzer	Agilent	E4447A	MY50180031	Jun. 25, 2019	1 Year
Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	Nov. 15, 2019	1 Year
Active Loop antenna	Schwarzbeck	FMZB-1519	1519-038	Sep. 29, 2019	1 Year
Double Ridged Horn Antenna	R&S	HF907	100276	Nov. 15, 2019	1 Year
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	Sep. 29, 2019	1 Year
Pre-amplifier	A.H.	PAM-0118	360	Sep. 29, 2019	1 Year
Pre-amplifier	TERA-MW	TRLA-0040 G35	101303	Sep. 29, 2019	1 Year
RF Cable	HUBSER	CP-X2+ CP-X1	W11.03+ W12.02	Sep. 29, 2019	1 Year
RF Cable	N/A	5m+6m+1m	06270619	Sep. 29, 2019	1 Year
MI Cable	HUBSER	C10-01-01-1 M	1091629	Sep. 29, 2019	1 Year
Test software	Audix	E3	V 6.11111b	N/A	N/A
Radiation 2#chamber					
EMI Test Receiver	R&S	ESCI	101364	Sep. 29, 2019	1 Year
Spectrum analyzer	Agilent	E4447A	MY50180031	Jun. 25, 2019	1 Year
Trilog Broadband Antenna	Schwarzbeck	VULB 9163	9163-994	Nov. 15, 2019	1 Year
Active Loop antenna	Schwarzbeck	FMZB-1519	1519-038	Sep. 29, 2019	1 Year
Double Ridged Horn Antenna	Schwarzbeck	BBHA9120	02108	Jul. 21, 2019	1 Year
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	Sep. 29, 2019	1 Year

Pre-amplifier	TERA-MW	TRLA-0040 G35	101303	Sep. 29, 2019	1 Year
RF Cable	N/A	14+1.5m	06270619	Sep. 29, 2019	1 Year
Test software	Audix	E3	V 6.11111b	N/A	N/A
Power Line Conducted Emissions Test					
EMI Test Receiver	R&S	ESU8	100316	Sep. 29, 2019	1 Year
LISN 1	R&S	ENV216	101109	Sep. 29, 2019	1 Year
LISN 2	R&S	ESH2-Z5	100309	Sep. 29, 2019	1 Year
Pulse Limiter	R&S	ESH3-Z2	101242	Sep. 29, 2019	1 Year
CE Cable 1	HUBSER	N/A	W10.01	Sep. 29, 2019	1 Year
Test software	Audix	E3	V 6.11111b	N/A	N/A

4. 26 dB Bandwidth, 6 dB Bandwidth and 99% Bandwidth

4.1. Block diagram of test setup



4.2. Limits

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Bandwidth	26 dB Bandwidth	5150 - 5250
	26 dB Bandwidth	5250 - 5350
	26 dB Bandwidth	5470 - 5725
	Minimum 500 kHz 6 dB Bandwidth	5725 - 5850

4.3. Test procedure

(1) Connect EUT's antenna output to spectrum analyzer by RF cable.

Center Frequency	The centre frequency of the channel under test
Detector	Peak
RBW	For 6 dB Bandwidth: RBW=100 kHz For 26 dB Bandwidth: approximately 1% of the emission bandwidth.
VBW	For 6 dB Bandwidth: VBW=300 kHz For 26 dB Bandwidth: >3 RBW
Trace	Max hold
Sweep	Auto couple

(2) Allow the trace to stabilize, measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 26 dB and 6 dB relative to the maximum level measured in the fundamental emission.

4.4. Test result

99% Bandwidth:

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	17.48	5171.160	5188.640	---	PASS
	Ant2	5180	17.52	5171.120	5188.640	---	PASS
	Ant1	5200	17.64	5191.080	5208.720	---	PASS
	Ant2	5200	17.60	5191.080	5208.680	---	PASS
	Ant1	5240	17.64	5231.040	5248.680	---	PASS
	Ant2	5240	17.60	5231.080	5248.680	---	PASS
	Ant1	5260	17.76	5251.000	5268.760	---	PASS
	Ant2	5260	17.64	5251.120	5268.760	---	PASS
	Ant1	5280	17.80	5271.000	5288.800	---	PASS
	Ant2	5280	17.64	5271.080	5288.720	---	PASS
	Ant1	5320	17.68	5311.120	5328.800	---	PASS
	Ant2	5320	17.68	5311.080	5328.760	---	PASS
	Ant1	5500	17.64	5491.040	5508.680	---	PASS
	Ant2	5500	17.52	5491.080	5508.600	---	PASS
	Ant1	5580	17.88	5570.920	5588.800	---	PASS
	Ant2	5580	17.76	5571.000	5588.760	---	PASS
	Ant1	5700	17.60	5691.120	5708.720	---	PASS
	Ant2	5700	17.56	5691.160	5708.720	---	PASS
	Ant1	5745	17.56	5736.160	5753.720	---	PASS
	Ant2	5745	17.52	5736.160	5753.680	---	PASS
	Ant1	5785	17.52	5776.160	5793.680	---	PASS
	Ant2	5785	17.48	5776.200	5793.680	---	PASS
	Ant1	5825	17.48	5816.160	5833.640	---	PASS
	Ant2	5825	17.44	5816.200	5833.640	---	PASS
11N20 SISO	Ant1	5180	18.28	5170.760	5189.040	---	PASS
	Ant2	5180	18.28	5170.760	5189.040	---	PASS
	Ant1	5200	18.36	5190.720	5209.080	---	PASS
	Ant2	5200	18.36	5190.720	5209.080	---	PASS
	Ant1	5240	18.40	5230.680	5249.080	---	PASS
	Ant2	5240	18.44	5230.680	5249.120	---	PASS
	Ant1	5260	18.52	5250.680	5269.200	---	PASS
	Ant2	5260	18.44	5250.760	5269.200	---	PASS
	Ant1	5280	18.52	5270.680	5289.200	---	PASS
	Ant2	5280	18.48	5270.680	5289.160	---	PASS
	Ant1	5320	18.44	5310.760	5329.200	---	PASS
	Ant2	5320	18.44	5310.720	5329.160	---	PASS
	Ant1	5500	18.40	5490.680	5509.080	---	PASS
	Ant2	5500	18.36	5490.680	5509.040	---	PASS
	Ant1	5580	18.60	5570.600	5589.200	---	PASS
	Ant2	5580	18.52	5570.640	5589.160	---	PASS
	Ant1	5700	18.36	5690.760	5709.120	---	PASS
	Ant2	5700	18.36	5690.760	5709.120	---	PASS
	Ant1	5745	18.32	5735.800	5754.120	---	PASS
	Ant2	5745	18.36	5735.760	5754.120	---	PASS
	Ant1	5785	18.24	5775.800	5794.040	---	PASS
	Ant2	5785	18.20	5775.840	5794.040	---	PASS

	Ant1	5825	18.24	5815.800	5834.040	---	PASS
	Ant2	5825	18.20	5815.840	5834.040	---	PASS
11N40 SISO	Ant1	5190	36.72	5171.520	5208.240	---	PASS
	Ant2	5190	36.64	5171.520	5208.160	---	PASS
	Ant1	5230	36.96	5211.280	5248.240	---	PASS
	Ant2	5230	37.04	5211.360	5248.400	---	PASS
	Ant1	5270	37.20	5251.280	5288.480	---	PASS
	Ant2	5270	37.04	5251.440	5288.480	---	PASS
	Ant1	5310	37.28	5291.360	5328.640	---	PASS
	Ant2	5310	37.28	5291.280	5328.560	---	PASS
	Ant1	5510	36.96	5491.280	5528.240	---	PASS
	Ant2	5510	36.96	5491.280	5528.240	---	PASS
	Ant1	5550	37.12	5531.200	5568.320	---	PASS
	Ant2	5550	37.04	5531.200	5568.240	---	PASS
	Ant1	5670	36.96	5651.440	5688.400	---	PASS
	Ant2	5670	37.04	5651.440	5688.480	---	PASS
	Ant1	5755	36.88	5736.600	5773.480	---	PASS
	Ant2	5755	37.04	5736.520	5773.560	---	PASS
	Ant1	5795	36.88	5776.520	5813.400	---	PASS
	Ant2	5795	36.88	5776.600	5813.480	---	PASS
11AC20 SISO	Ant1	5180	18.20	5170.840	5189.040	---	PASS
	Ant2	5180	18.20	5170.840	5189.040	---	PASS
	Ant1	5200	18.28	5190.800	5209.080	---	PASS
	Ant2	5200	18.28	5190.800	5209.080	---	PASS
	Ant1	5240	18.32	5230.760	5249.080	---	PASS
	Ant2	5240	18.24	5230.800	5249.040	---	PASS
	Ant1	5260	18.36	5250.760	5269.120	---	PASS
	Ant2	5260	18.28	5250.840	5269.120	---	PASS
	Ant1	5280	18.40	5270.760	5289.160	---	PASS
	Ant2	5280	18.32	5270.800	5289.120	---	PASS
	Ant1	5320	18.28	5310.840	5329.120	---	PASS
	Ant2	5320	18.32	5310.800	5329.120	---	PASS
	Ant1	5500	18.24	5490.800	5509.040	---	PASS
	Ant2	5500	18.20	5490.800	5509.000	---	PASS
	Ant1	5580	18.44	5570.720	5589.160	---	PASS
	Ant2	5580	18.44	5570.720	5589.160	---	PASS
	Ant1	5700	18.24	5690.840	5709.080	---	PASS
	Ant2	5700	18.20	5690.840	5709.040	---	PASS
	Ant1	5745	18.24	5735.840	5754.080	---	PASS
	Ant2	5745	18.20	5735.880	5754.080	---	PASS
11AC40 SISO	Ant1	5785	18.12	5775.880	5794.000	---	PASS
	Ant2	5785	18.08	5775.920	5794.000	---	PASS
	Ant1	5825	18.12	5815.880	5834.000	---	PASS
	Ant2	5825	18.12	5815.880	5834.000	---	PASS
	Ant1	5190	36.56	5171.600	5208.160	---	PASS
	Ant2	5190	36.56	5171.600	5208.160	---	PASS
	Ant1	5230	36.72	5211.440	5248.160	---	PASS
	Ant2	5230	36.64	5211.520	5248.160	---	PASS
	Ant1	5270	36.88	5251.440	5288.320	---	PASS
	Ant2	5270	36.64	5251.600	5288.240	---	PASS
	Ant1	5310	36.88	5291.520	5328.400	---	PASS

	Ant2	5310	36.80	5291.520	5328.320	---	PASS
	Ant1	5510	36.64	5491.440	5528.080	---	PASS
	Ant2	5510	36.64	5491.440	5528.080	---	PASS
	Ant1	5550	36.72	5531.440	5568.160	---	PASS
	Ant2	5550	36.72	5531.440	5568.160	---	PASS
	Ant1	5670	36.64	5651.600	5688.240	---	PASS
	Ant2	5670	36.72	5651.520	5688.240	---	PASS
	Ant1	5755	36.56	5736.760	5773.320	---	PASS
	Ant2	5755	36.64	5736.680	5773.320	---	PASS
	Ant1	5795	36.56	5776.680	5813.240	---	PASS
	Ant2	5795	36.56	5776.760	5813.320	---	PASS
	Ant1	5210	76.32	5171.440	5247.760	---	PASS
11AC80 SISO	Ant2	5210	76.48	5171.440	5247.920	---	PASS
	Ant1	5290	76.80	5251.440	5328.240	---	PASS
	Ant2	5290	76.48	5251.600	5328.080	---	PASS
	Ant1	5530	76.32	5491.280	5567.600	---	PASS
	Ant2	5530	76.48	5491.280	5567.760	---	PASS
	Ant1	5610	76.80	5571.120	5647.920	---	PASS
	Ant2	5610	76.64	5571.280	5647.920	---	PASS
	Ant1	5775	76.48	5736.760	5813.240	---	PASS
	Ant2	5775	76.48	5736.760	5813.240	---	PASS

26 dB EBW:

Test Mode	Antenna	Channel	26 dB EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5180	20.440	5169.760	5190.200	---	PASS
	Ant2	5180	22.120	5168.800	5190.920	---	PASS
	Ant1	5200	22.600	5187.720	5210.320	---	PASS
	Ant2	5200	23.800	5187.640	5211.440	---	PASS
	Ant1	5240	26.160	5225.360	5251.520	---	PASS
	Ant2	5240	26.240	5225.280	5251.520	---	PASS
	Ant1	5260	25.200	5246.560	5271.760	---	PASS
	Ant2	5260	22.800	5248.760	5271.560	---	PASS
	Ant1	5280	25.560	5266.600	5292.160	---	PASS
	Ant2	5280	24.080	5267.640	5291.720	---	PASS
	Ant1	5320	23.840	5307.680	5331.520	---	PASS
	Ant2	5320	23.880	5307.640	5331.520	---	PASS
	Ant1	5500	22.600	5487.680	5510.280	---	PASS
	Ant2	5500	21.440	5488.760	5510.200	---	PASS
	Ant1	5580	27.040	5565.160	5592.200	---	PASS
	Ant2	5580	26.360	5565.200	5591.560	---	PASS
	Ant1	5700	21.480	5688.760	5710.240	---	PASS
	Ant2	5700	20.520	5689.680	5710.200	---	PASS
	Ant1	5745	21.440	5733.800	5755.240	---	PASS
	Ant2	5745	21.440	5733.800	5755.240	---	PASS
	Ant1	5785	20.480	5774.720	5795.200	---	PASS
	Ant2	5785	20.160	5775.040	5795.200	---	PASS
	Ant1	5825	20.440	5814.760	5835.200	---	PASS
	Ant2	5825	20.120	5815.040	5835.160	---	PASS
11N20 SISO	Ant1	5180	21.120	5169.320	5190.440	---	PASS
	Ant2	5180	20.640	5169.400	5190.040	---	PASS

	Ant1	5200	20.800	5189.280	5210.080	---	PASS
	Ant2	5200	21.360	5189.160	5210.520	---	PASS
	Ant1	5240	21.360	5229.160	5250.520	---	PASS
	Ant2	5240	21.520	5229.160	5250.680	---	PASS
	Ant1	5260	21.520	5249.120	5270.640	---	PASS
	Ant2	5260	21.480	5249.200	5270.680	---	PASS
	Ant1	5280	21.560	5269.120	5290.680	---	PASS
	Ant2	5280	21.560	5269.120	5290.680	---	PASS
	Ant1	5320	21.440	5309.240	5330.680	---	PASS
	Ant2	5320	21.520	5309.160	5330.680	---	PASS
	Ant1	5500	20.840	5489.240	5510.080	---	PASS
	Ant2	5500	20.840	5489.240	5510.080	---	PASS
	Ant1	5580	22.480	5568.240	5590.720	---	PASS
	Ant2	5580	22.320	5568.280	5590.600	---	PASS
	Ant1	5700	20.320	5689.880	5710.200	---	PASS
	Ant2	5700	20.440	5689.800	5710.240	---	PASS
	Ant1	5745	20.240	5734.880	5755.120	---	PASS
	Ant2	5745	20.280	5734.880	5755.160	---	PASS
	Ant1	5785	20.160	5774.880	5795.040	---	PASS
	Ant2	5785	20.200	5774.880	5795.080	---	PASS
	Ant1	5825	20.200	5814.880	5835.080	---	PASS
	Ant2	5825	20.200	5814.880	5835.080	---	PASS
11N40 SISO	Ant1	5190	41.280	5169.120	5210.400	---	PASS
	Ant2	5190	41.200	5169.120	5210.320	---	PASS
	Ant1	5230	42.560	5207.600	5250.160	---	PASS
	Ant2	5230	54.160	5200.560	5254.720	---	PASS
	Ant1	5270	64.160	5237.280	5301.440	---	PASS
	Ant2	5270	46.880	5247.760	5294.640	---	PASS
	Ant1	5310	61.120	5280.480	5341.600	---	PASS
	Ant2	5310	61.120	5280.480	5341.600	---	PASS
	Ant1	5510	57.120	5477.520	5534.640	---	PASS
	Ant2	5510	50.000	5480.480	5530.480	---	PASS
	Ant1	5550	52.480	5517.680	5570.160	---	PASS
	Ant2	5550	57.280	5517.360	5574.640	---	PASS
	Ant1	5670	60.960	5640.560	5701.520	---	PASS
	Ant2	5670	63.920	5637.680	5701.600	---	PASS
	Ant1	5755	45.600	5734.040	5779.640	---	PASS
	Ant2	5755	45.440	5734.120	5779.560	---	PASS
	Ant1	5795	41.360	5774.120	5815.480	---	PASS
	Ant2	5795	45.440	5774.120	5819.560	---	PASS
11AC20 SISO	Ant1	5180	20.160	5169.840	5190.000	---	PASS
	Ant2	5180	20.200	5169.840	5190.040	---	PASS
	Ant1	5200	20.640	5189.760	5210.400	---	PASS
	Ant2	5200	20.880	5189.760	5210.640	---	PASS
	Ant1	5240	21.200	5229.320	5250.520	---	PASS
	Ant2	5240	20.960	5229.640	5250.600	---	PASS
	Ant1	5260	21.480	5249.200	5270.680	---	PASS
	Ant2	5260	20.840	5249.800	5270.640	---	PASS
	Ant1	5280	21.480	5269.160	5290.640	---	PASS
	Ant2	5280	21.440	5269.200	5290.640	---	PASS
	Ant1	5320	20.920	5309.760	5330.680	---	PASS

	Ant2	5320	21.560	5309.120	5330.680	---	PASS
	Ant1	5500	20.240	5489.840	5510.080	---	PASS
	Ant2	5500	20.240	5489.800	5510.040	---	PASS
	Ant1	5580	21.680	5569.080	5590.760	---	PASS
	Ant2	5580	22.520	5568.280	5590.800	---	PASS
	Ant1	5700	20.320	5689.920	5710.240	---	PASS
	Ant2	5700	20.320	5689.880	5710.200	---	PASS
	Ant1	5745	20.280	5734.880	5755.160	---	PASS
	Ant2	5745	20.360	5734.880	5755.240	---	PASS
	Ant1	5785	20.200	5774.880	5795.080	---	PASS
	Ant2	5785	20.160	5774.920	5795.080	---	PASS
	Ant1	5825	20.240	5814.840	5835.080	---	PASS
	Ant2	5825	20.240	5814.880	5835.120	---	PASS
	Ant1	5190	41.200	5169.280	5210.480	---	PASS
11AC40 SISO	Ant2	5190	41.120	5169.360	5210.480	---	PASS
	Ant1	5230	40.960	5209.360	5250.320	---	PASS
	Ant2	5230	41.120	5209.280	5250.400	---	PASS
	Ant1	5270	48.080	5244.480	5292.560	---	PASS
	Ant2	5270	43.120	5249.360	5292.480	---	PASS
	Ant1	5310	63.440	5279.200	5342.640	---	PASS
	Ant2	5310	59.360	5279.200	5338.560	---	PASS
	Ant1	5510	41.200	5489.200	5530.400	---	PASS
	Ant2	5510	40.960	5489.360	5530.320	---	PASS
	Ant1	5550	42.480	5527.840	5570.320	---	PASS
	Ant2	5550	41.200	5529.200	5570.400	---	PASS
	Ant1	5670	40.960	5649.440	5690.400	---	PASS
	Ant2	5670	41.360	5649.360	5690.720	---	PASS
	Ant1	5755	41.200	5734.440	5775.640	---	PASS
	Ant2	5755	41.040	5734.520	5775.560	---	PASS
	Ant1	5795	40.960	5774.440	5815.400	---	PASS
	Ant2	5795	40.960	5774.600	5815.560	---	PASS
11AC80 SISO	Ant1	5210	82.400	5168.720	5251.120	---	PASS
	Ant2	5210	82.240	5168.720	5250.960	---	PASS
	Ant1	5290	92.480	5238.800	5331.280	---	PASS
	Ant2	5290	84.000	5247.280	5331.280	---	PASS
	Ant1	5530	82.240	5488.720	5570.960	---	PASS
	Ant2	5530	82.240	5488.720	5570.960	---	PASS
	Ant1	5610	103.040	5548.080	5651.120	---	PASS
	Ant2	5610	102.720	5548.240	5650.960	---	PASS
	Ant1	5775	82.400	5733.880	5816.280	---	PASS
	Ant2	5775	82.400	5733.880	5816.280	---	PASS

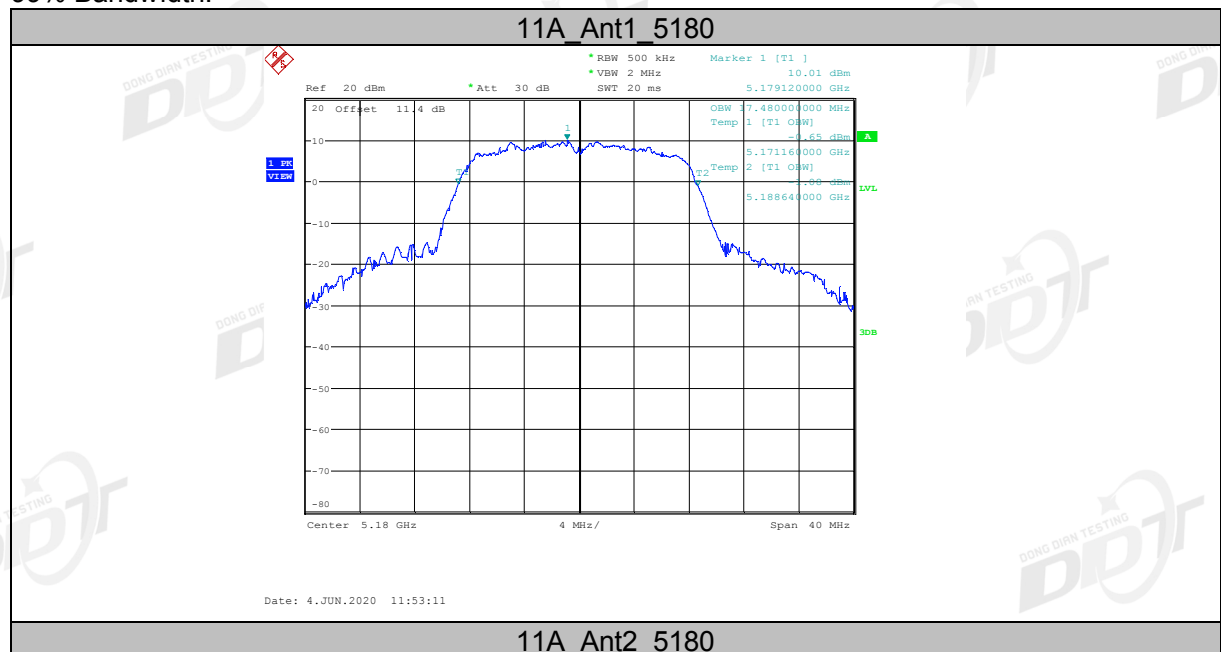
6 db EBW:

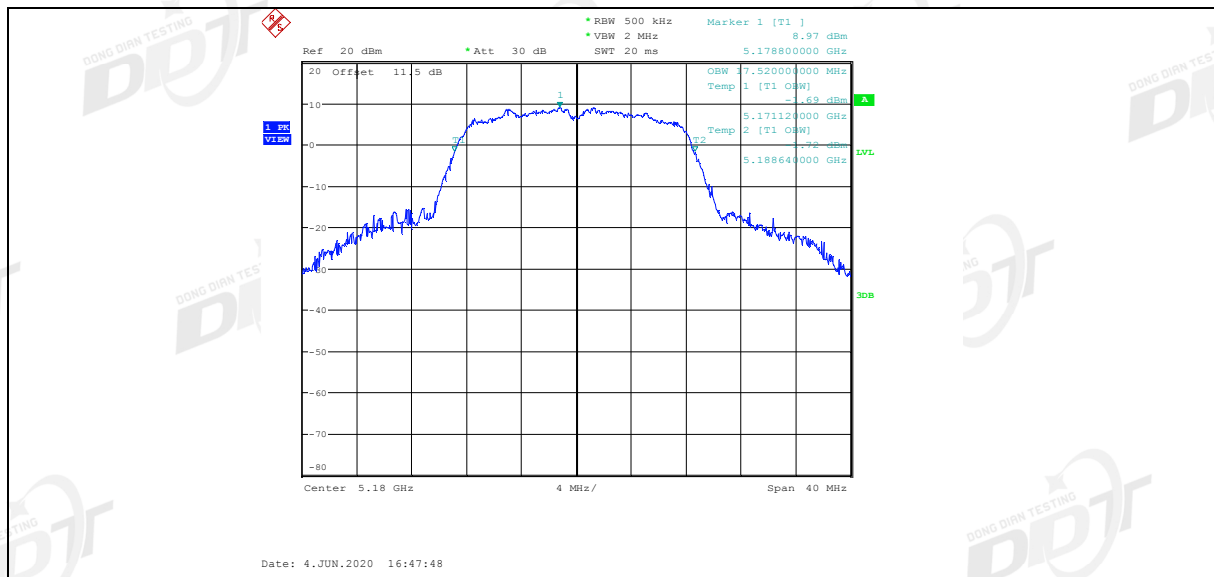
Test Mode	Antenna	Channel	6 db EBW [MHz]	FL [MHz]	FH [MHz]	Limit [MHz]	Verdict
11A	Ant1	5745	15.200	5737.360	5752.560	0.5	PASS
	Ant2	5745	15.200	5737.360	5752.560	0.5	PASS
	Ant1	5785	15.160	5777.400	5792.560	0.5	PASS
	Ant2	5785	15.200	5777.360	5792.560	0.5	PASS
	Ant1	5825	15.200	5817.360	5832.560	0.5	PASS
	Ant2	5825	15.160	5817.360	5832.520	0.5	PASS

11N20 SISO	Ant1	5745	15.120	5737.400	5752.520	0.5	PASS
	Ant2	5745	15.200	5737.360	5752.560	0.5	PASS
	Ant1	5785	15.200	5777.360	5792.560	0.5	PASS
	Ant2	5785	15.200	5777.360	5792.560	0.5	PASS
	Ant1	5825	15.480	5817.040	5832.520	0.5	PASS
	Ant2	5825	15.200	5817.360	5832.560	0.5	PASS
11N40 SISO	Ant1	5755	35.360	5737.320	5772.680	0.5	PASS
	Ant2	5755	35.280	5737.320	5772.600	0.5	PASS
	Ant1	5795	35.280	5777.320	5812.600	0.5	PASS
	Ant2	5795	35.280	5777.320	5812.600	0.5	PASS
11AC20 SISO	Ant1	5745	15.200	5737.360	5752.560	0.5	PASS
	Ant2	5745	15.200	5737.360	5752.560	0.5	PASS
	Ant1	5785	15.160	5777.400	5792.560	0.5	PASS
	Ant2	5785	15.200	5777.360	5792.560	0.5	PASS
	Ant1	5825	15.200	5817.360	5832.560	0.5	PASS
	Ant2	5825	15.200	5817.360	5832.560	0.5	PASS
11AC40 SISO	Ant1	5755	35.280	5737.320	5772.600	0.5	PASS
	Ant2	5755	35.360	5737.320	5772.680	0.5	PASS
	Ant1	5795	35.280	5777.320	5812.600	0.5	PASS
	Ant2	5795	35.280	5777.320	5812.600	0.5	PASS
11AC80 SISO	Ant1	5775	75.520	5737.240	5812.760	0.5	PASS
	Ant2	5775	76.160	5737.240	5813.400	0.5	PASS

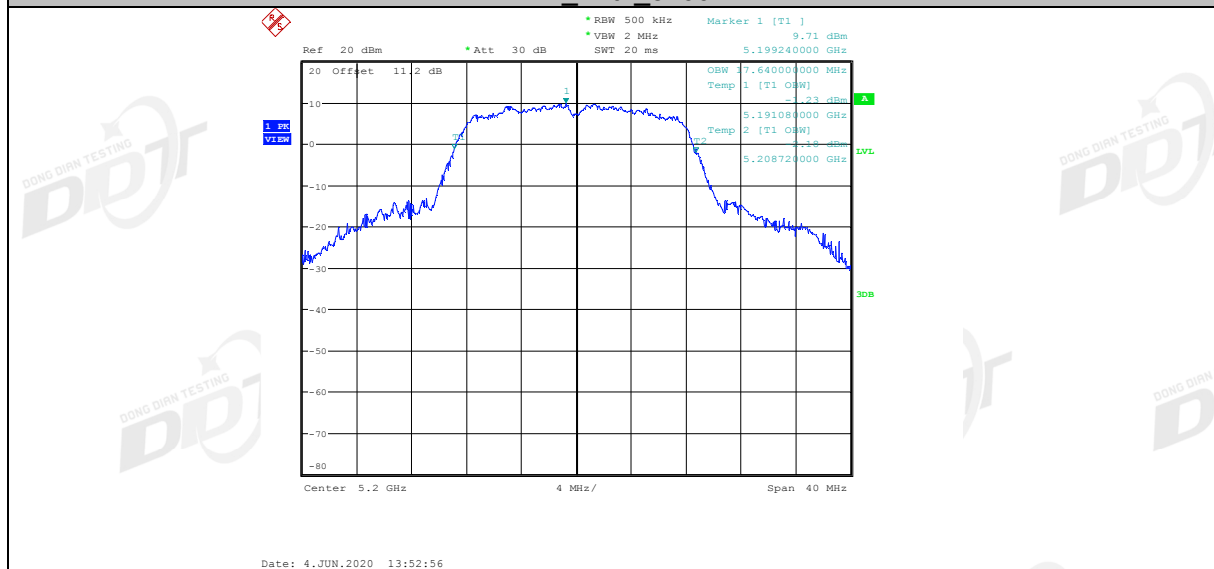
4.5. Original test data

99% Bandwidth:

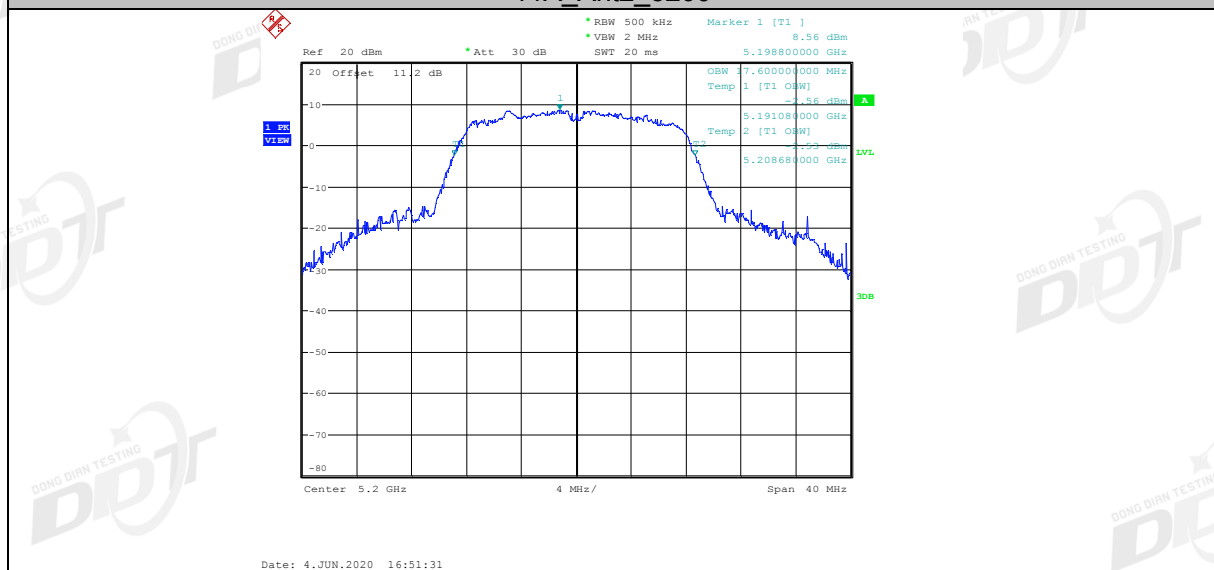




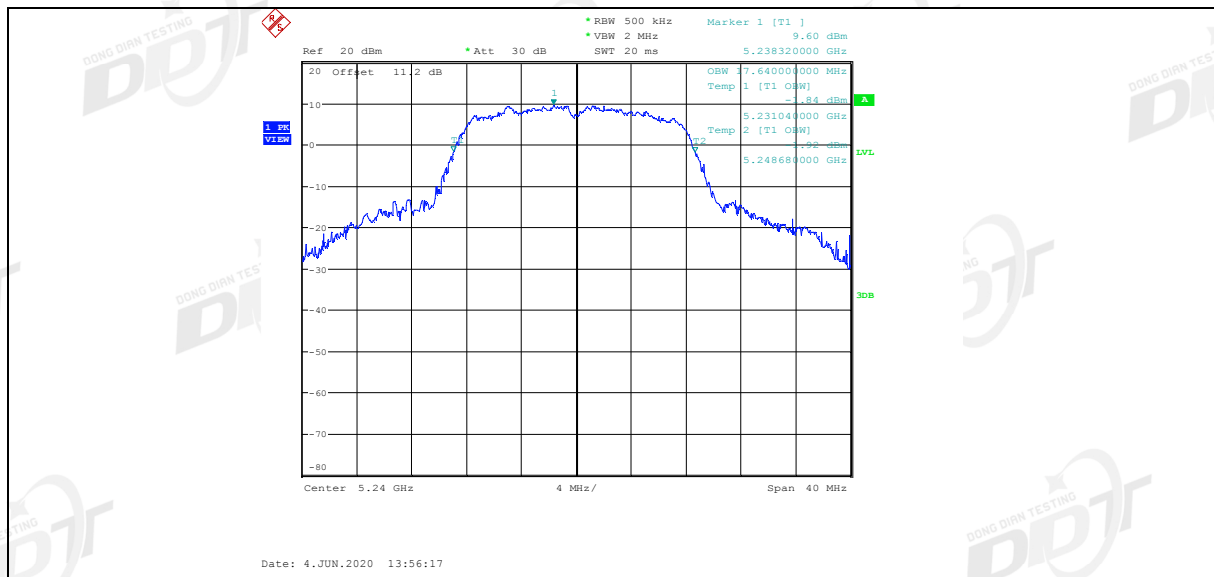
11A_Ant1_5200



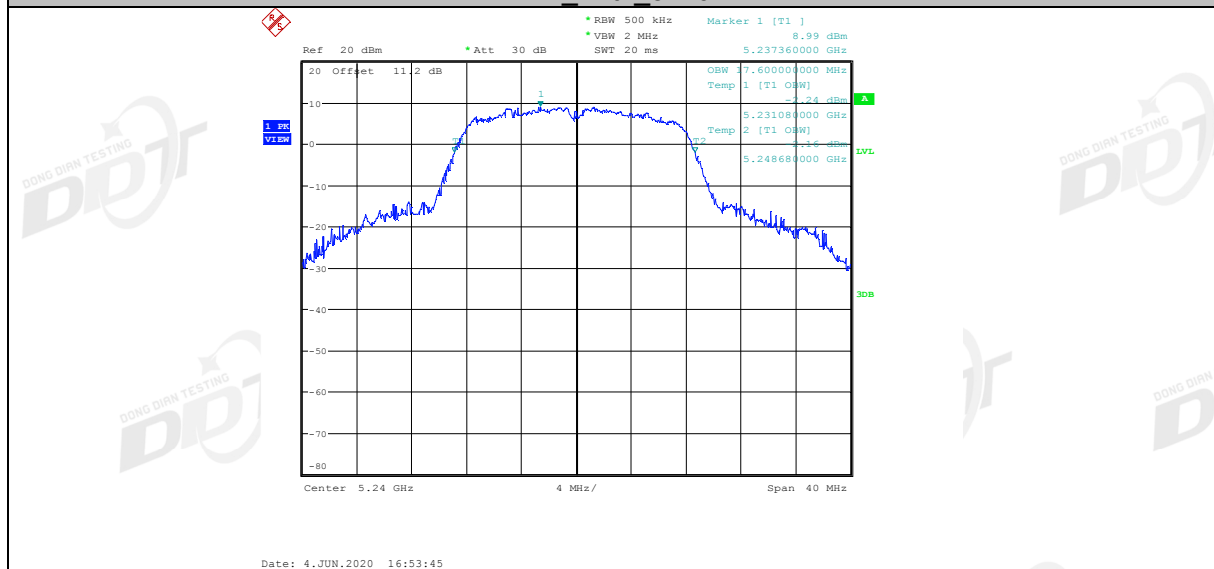
11A_Ant2_5200



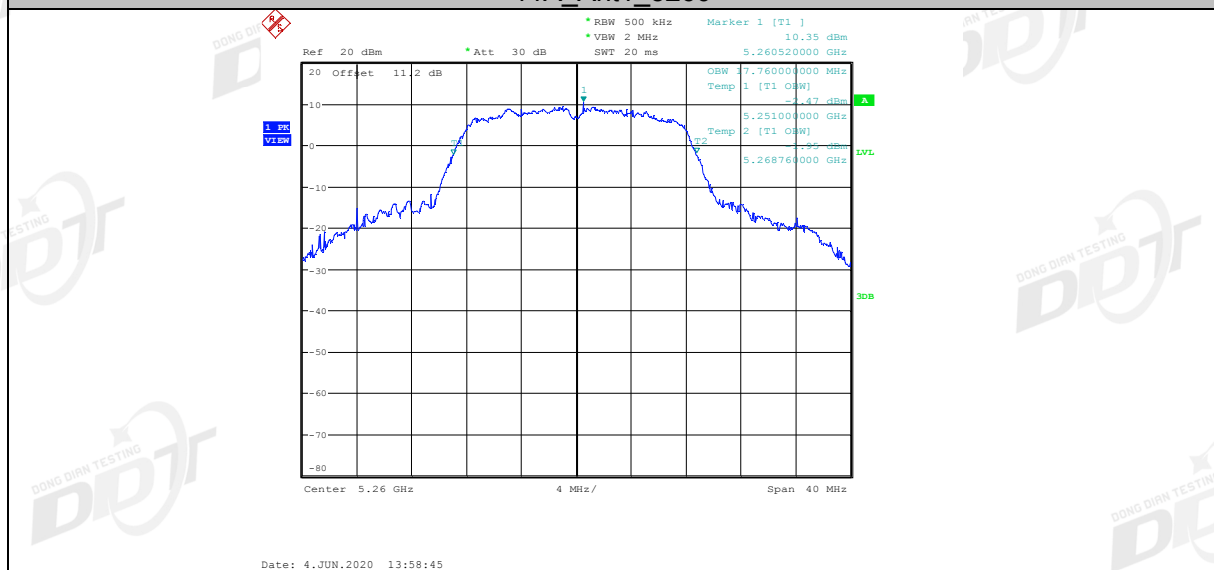
11A_Ant1_5240



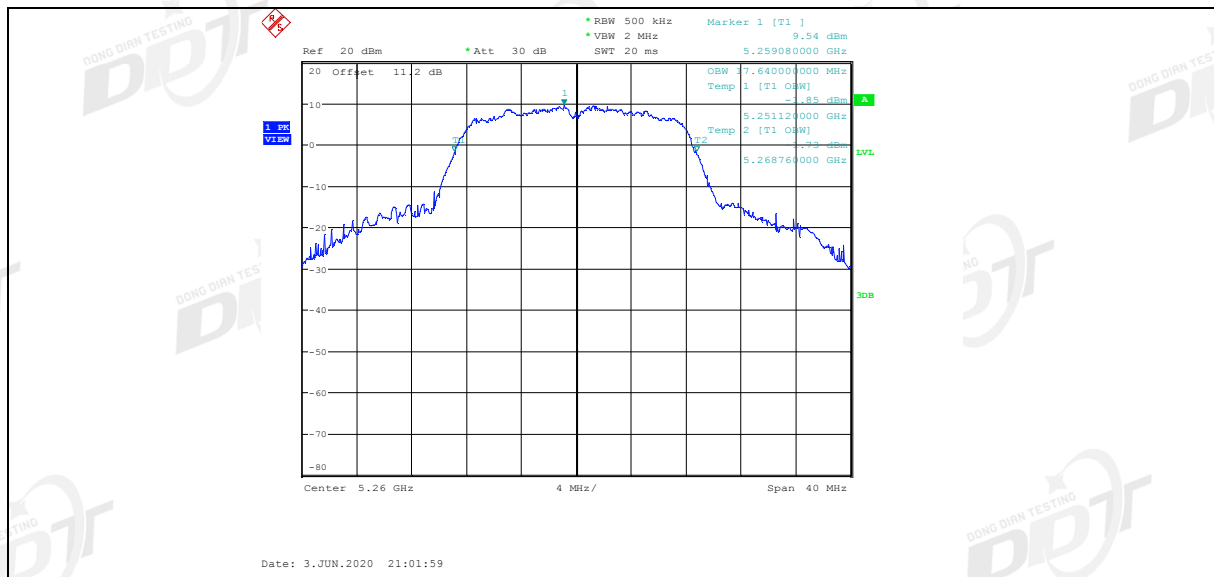
11A_Ant2_5240



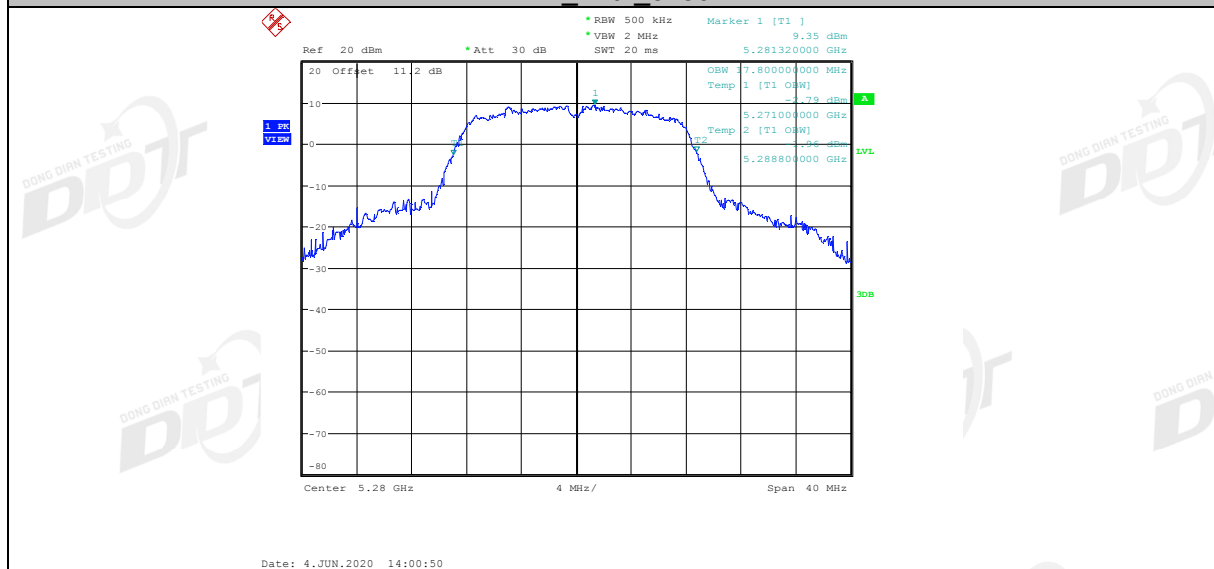
11A_Ant1_5260



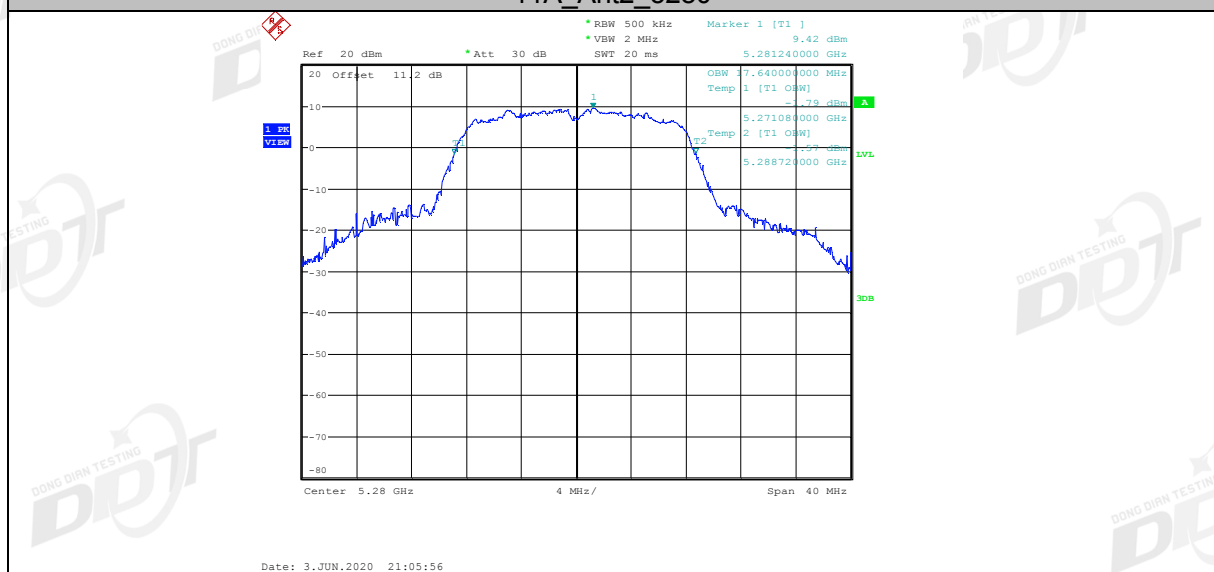
11A_Ant2_5260



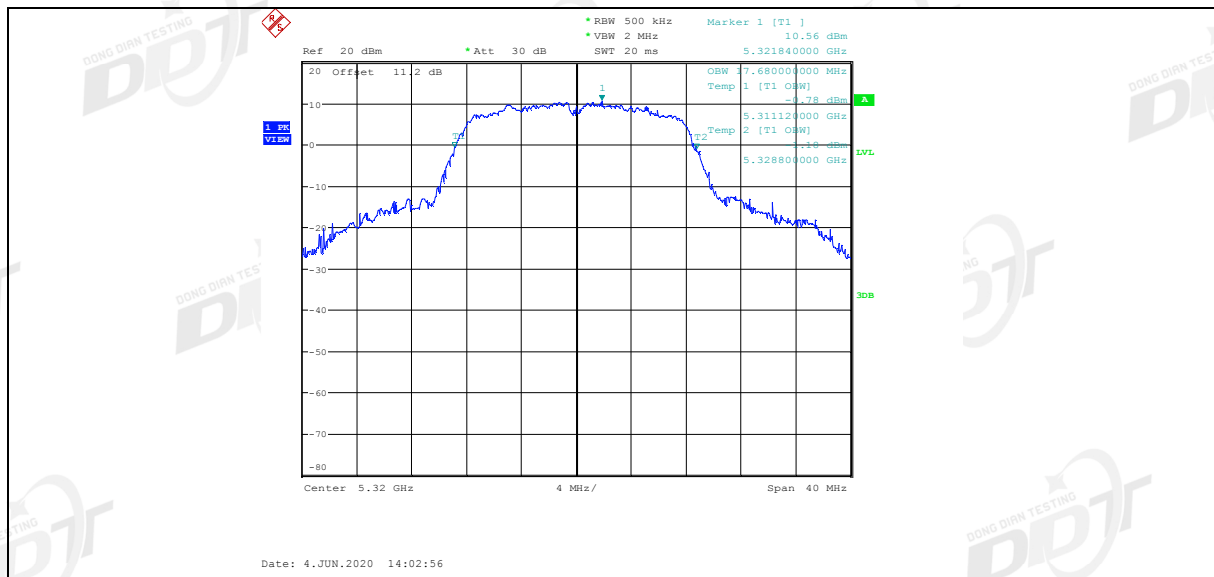
11A_Ant1_5280



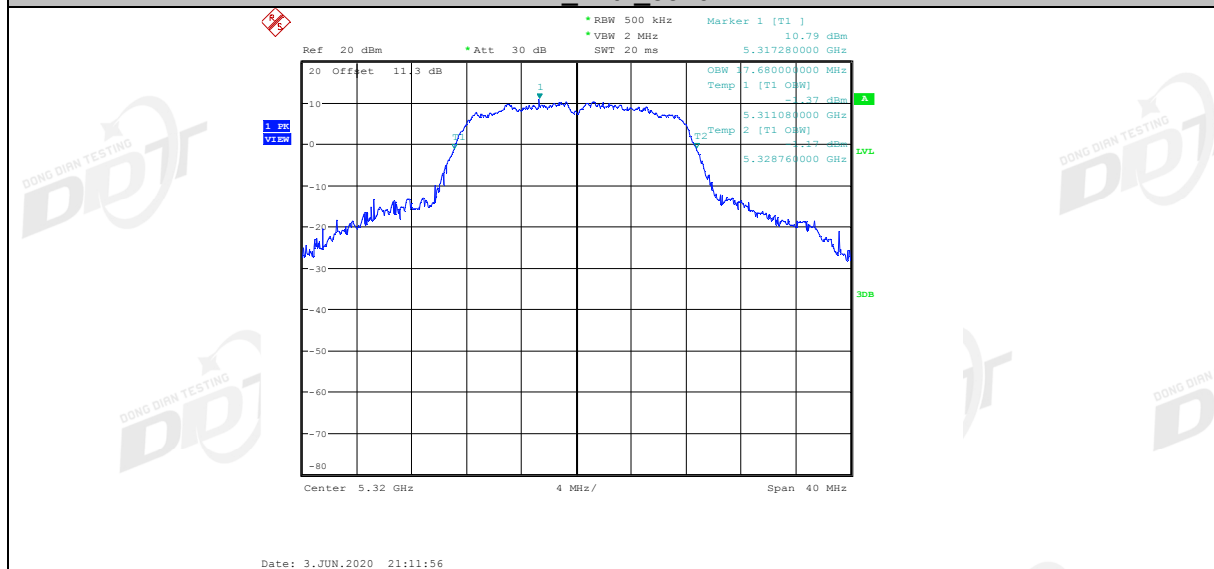
11A_Ant2_5280



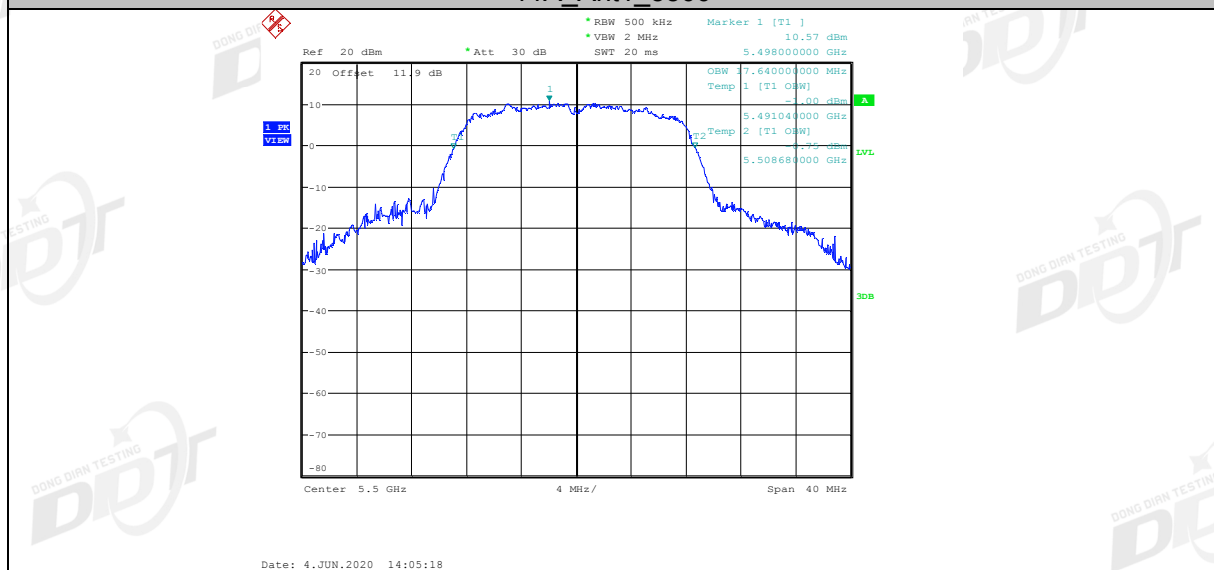
11A_Ant1_5320



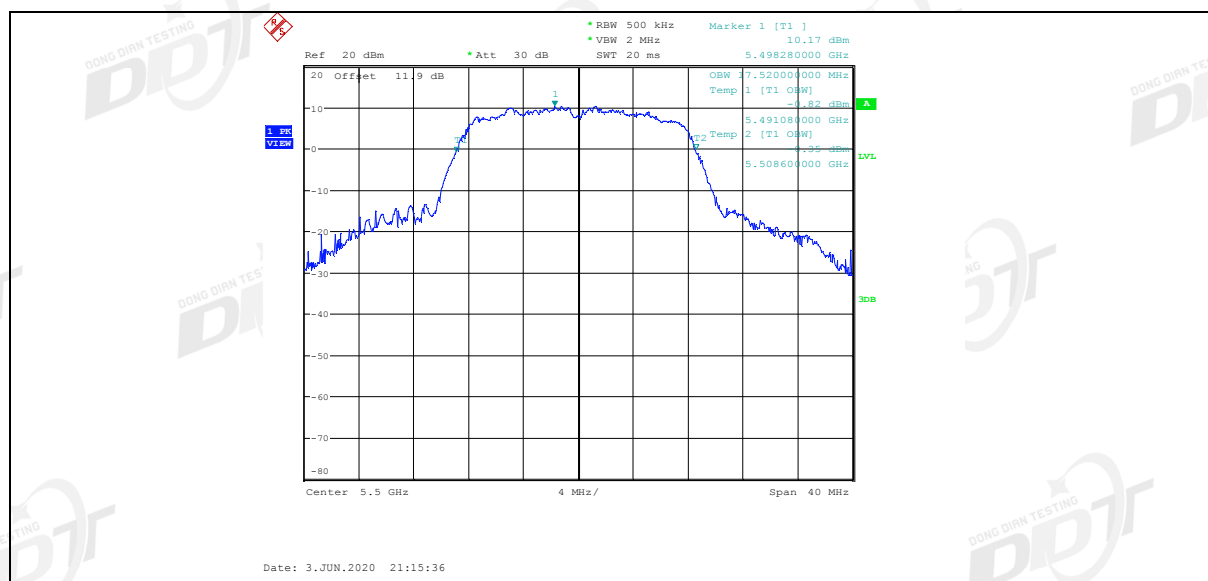
11A_Ant2_5320



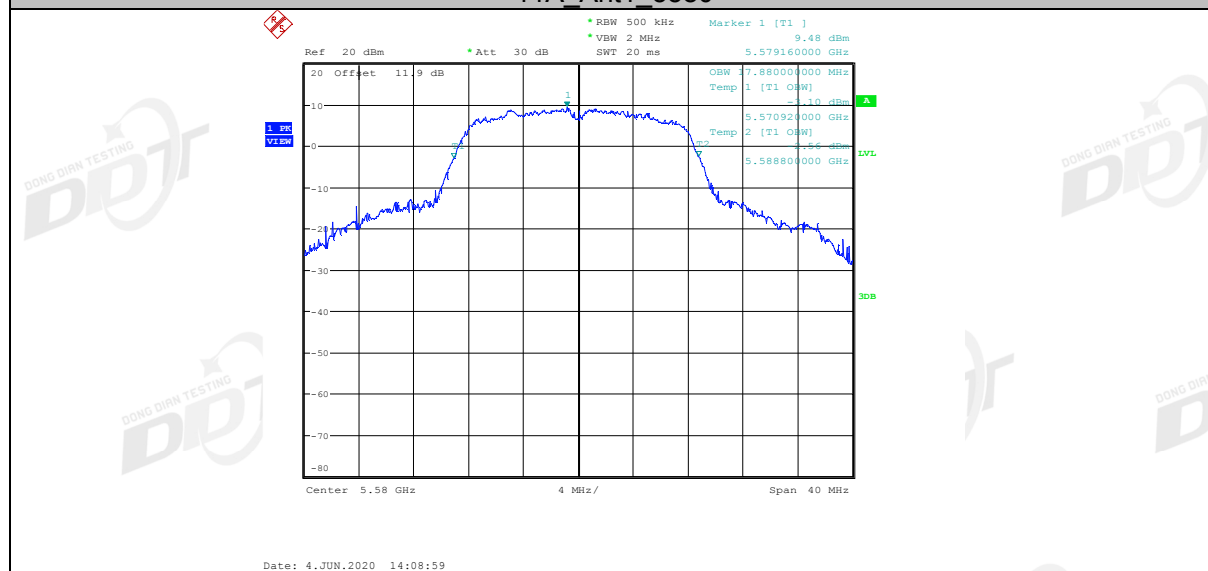
11A_Ant1_5500



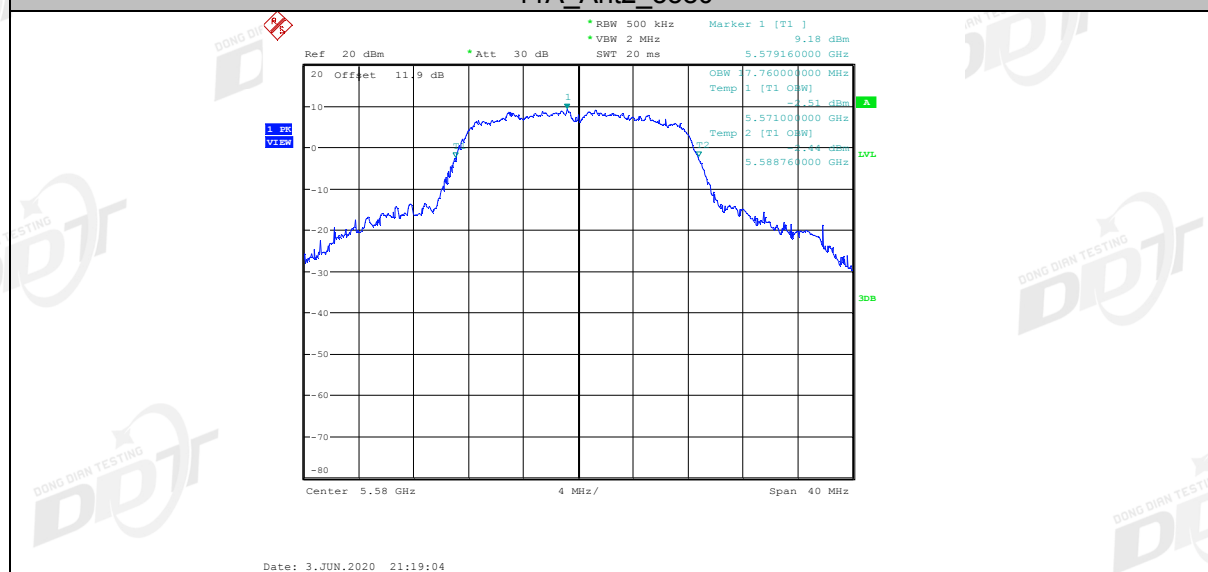
11A_Ant2_5500



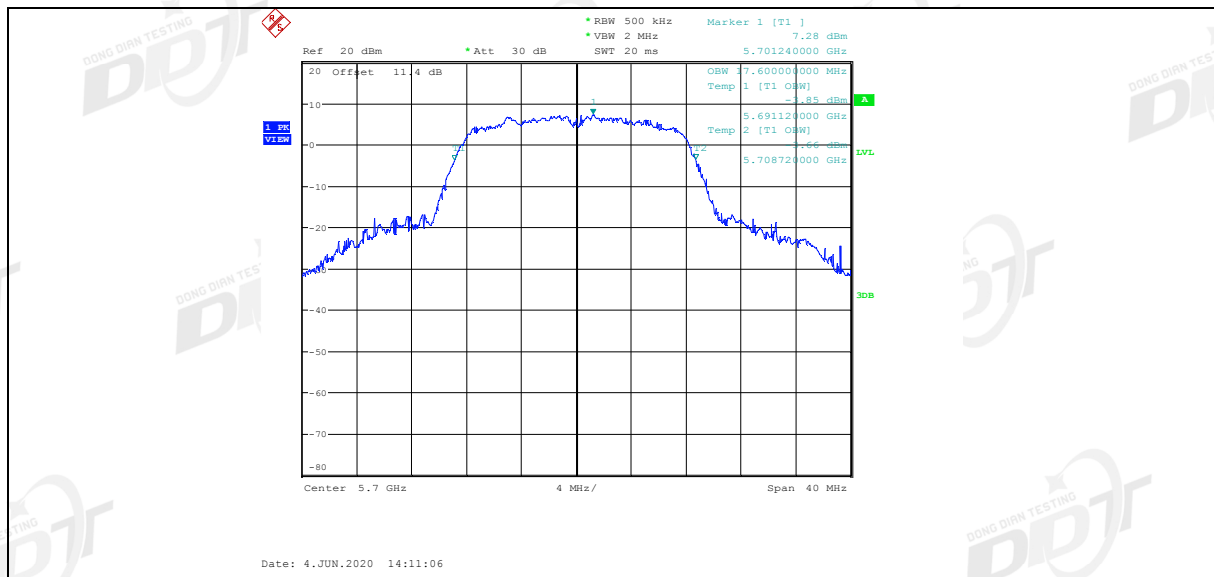
11A_Ant1_5580



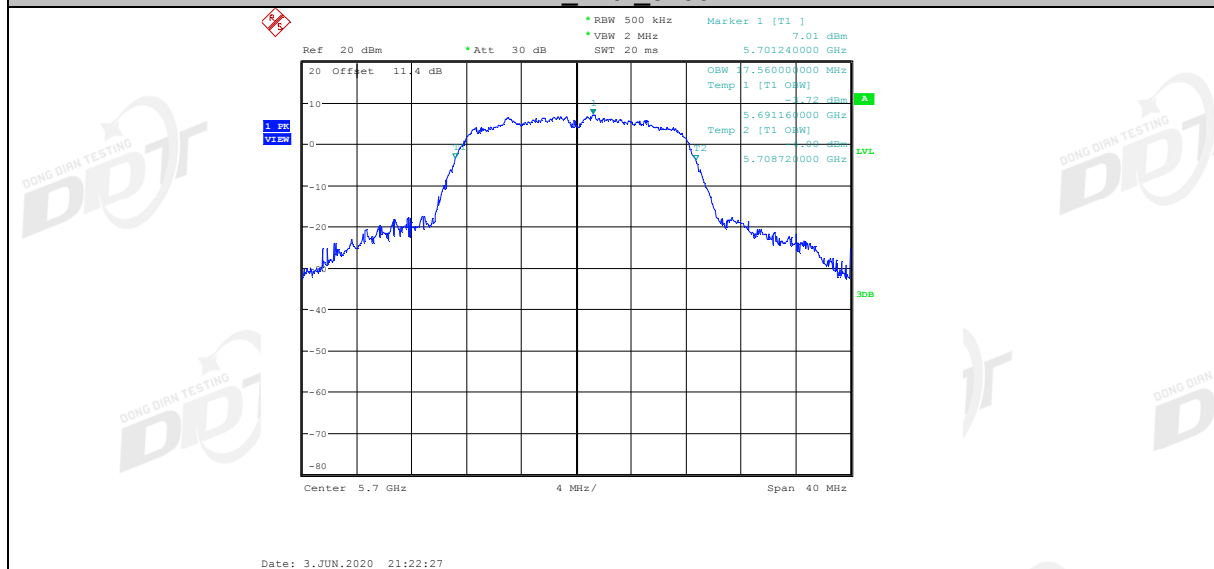
11A_Ant2_5580



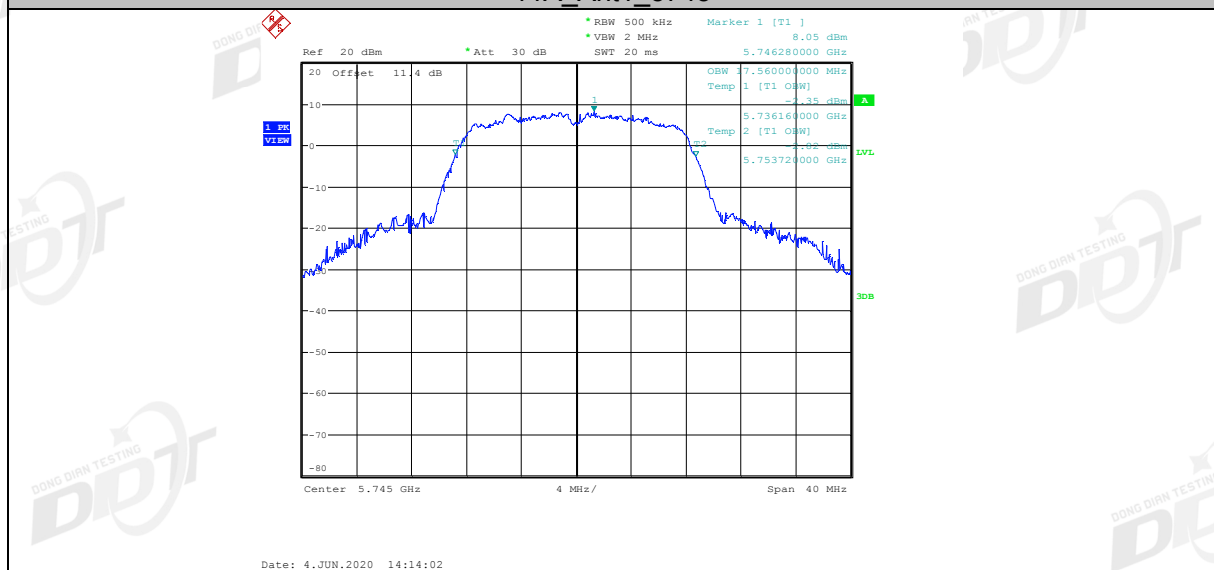
11A_Ant1_5700



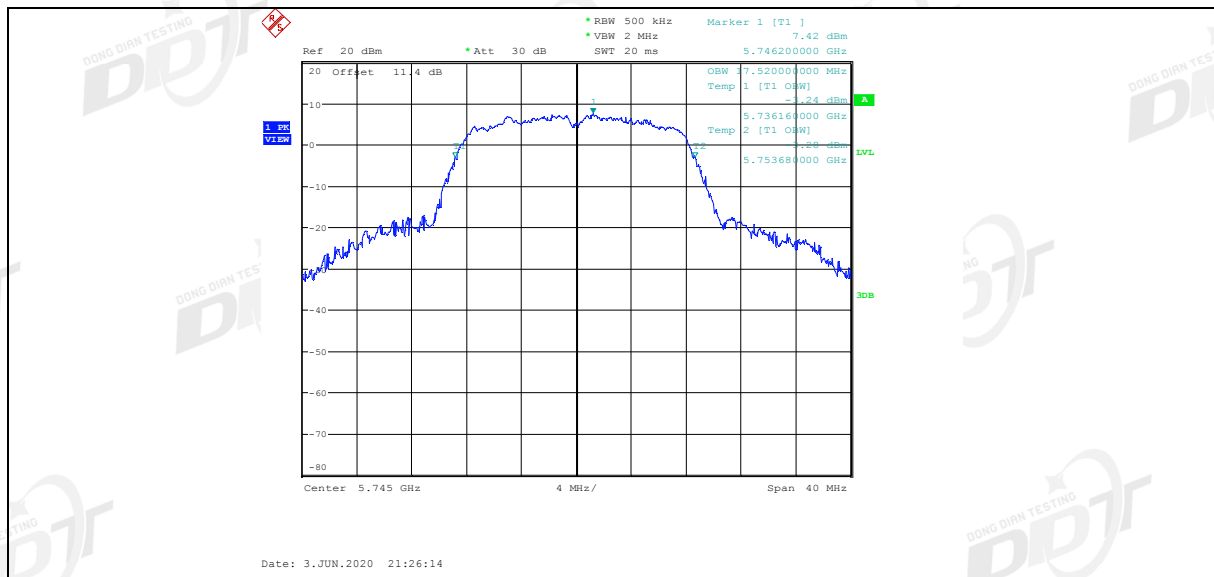
11A_Ant2_5700



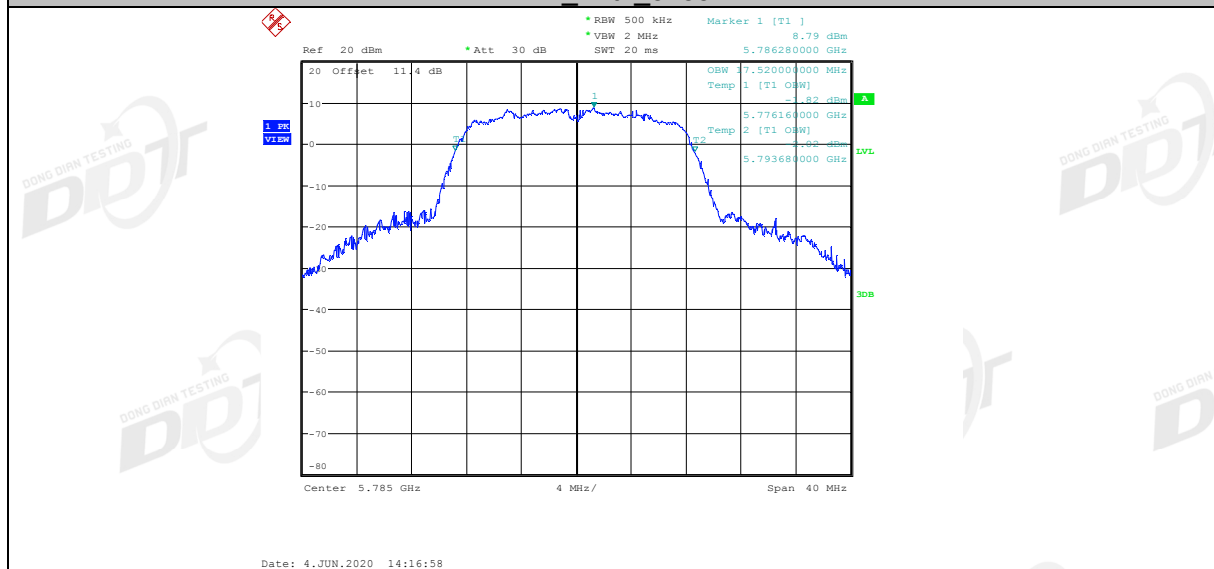
11A_Ant1_5745



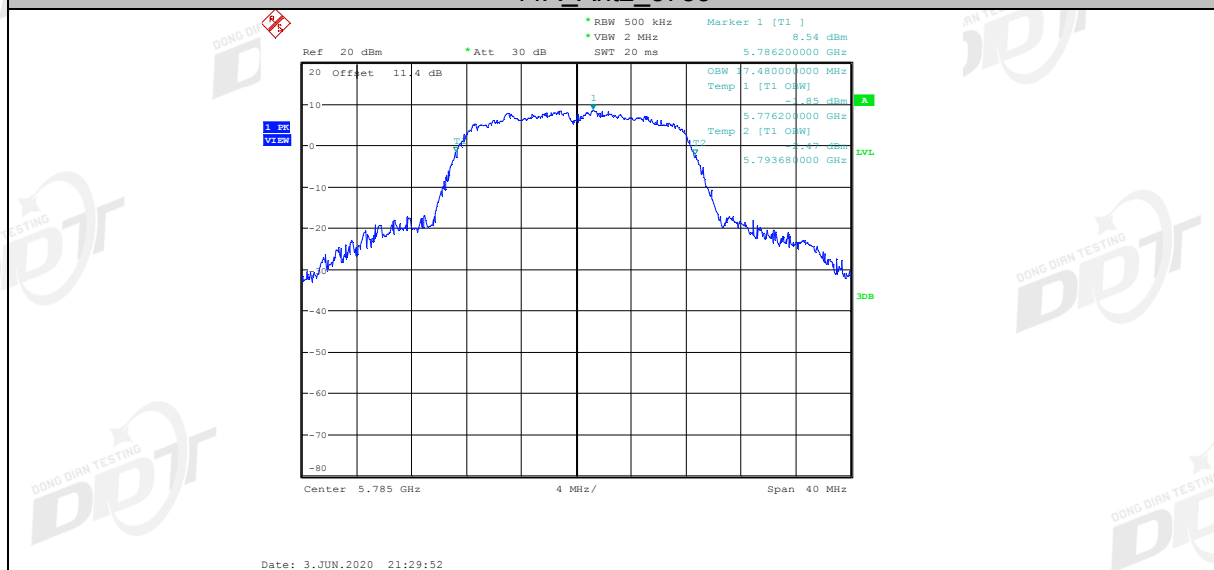
11A_Ant2_5745



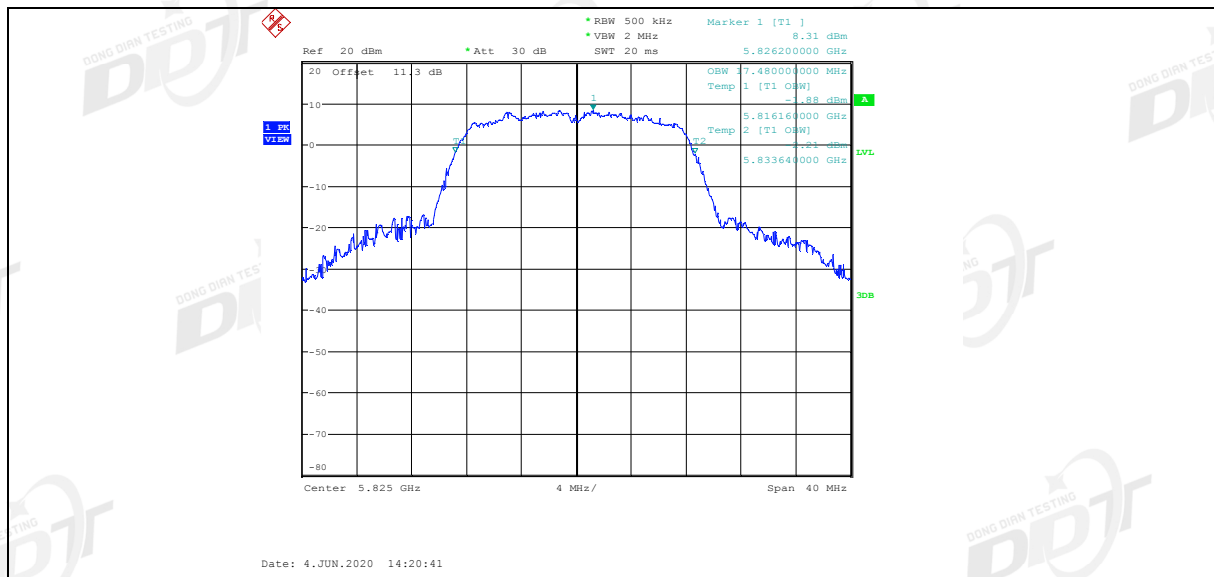
11A_Ant1_5785



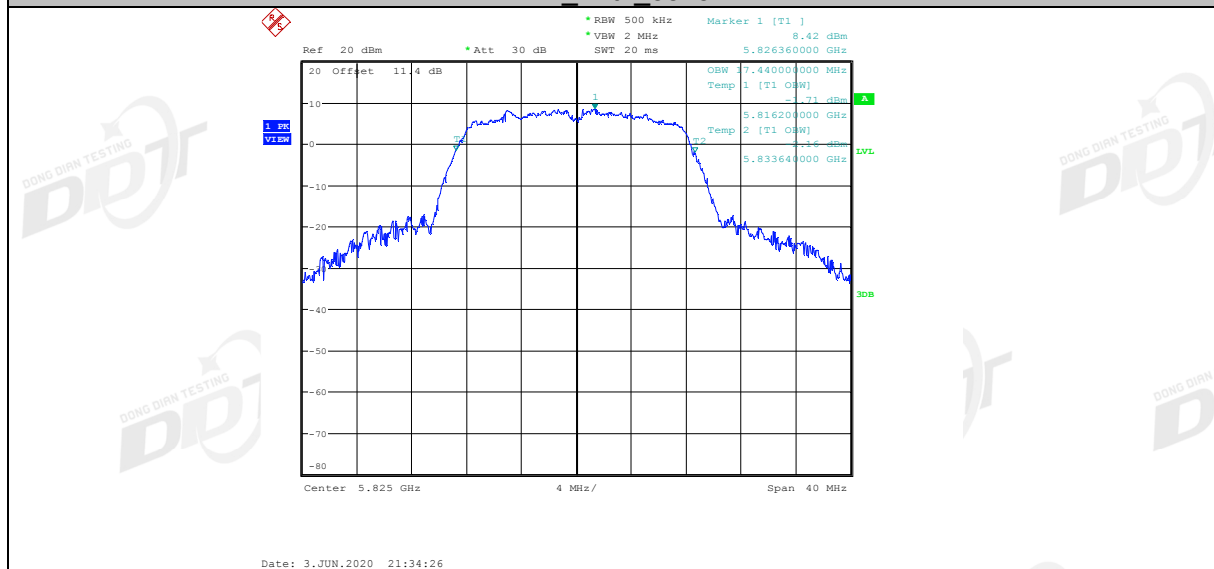
11A_Ant2_5785



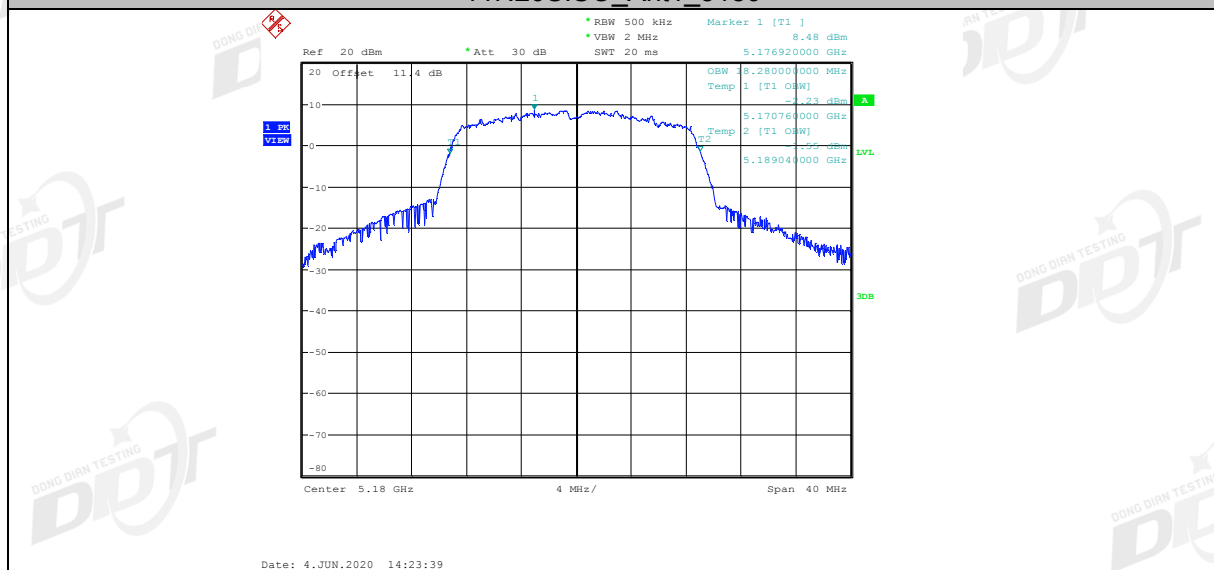
11A_Ant1_5825



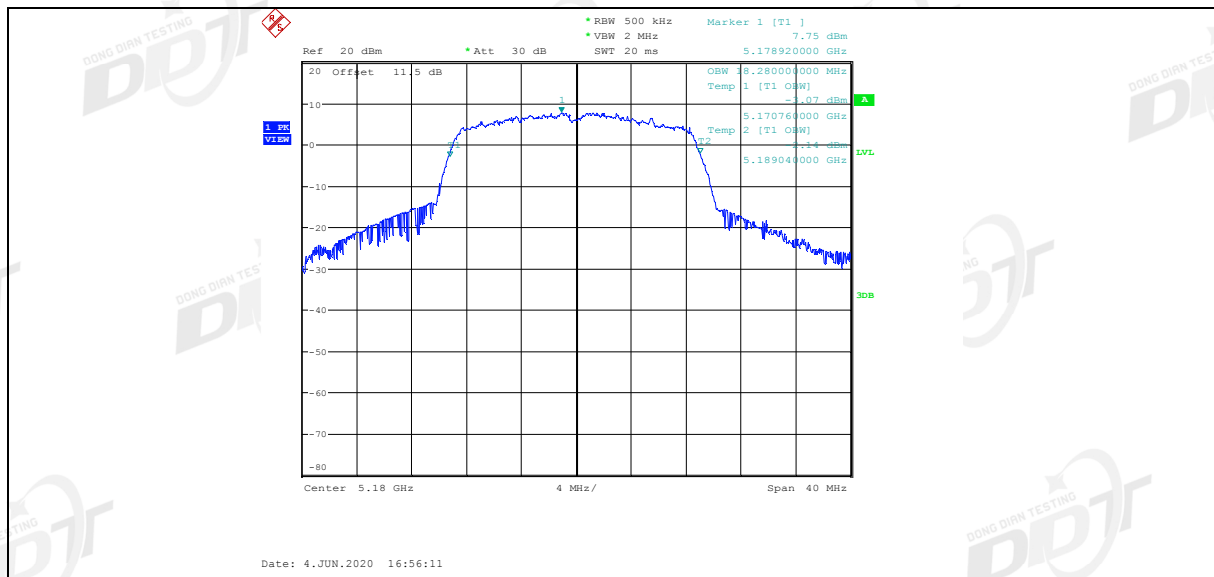
11A_Ant2_5825



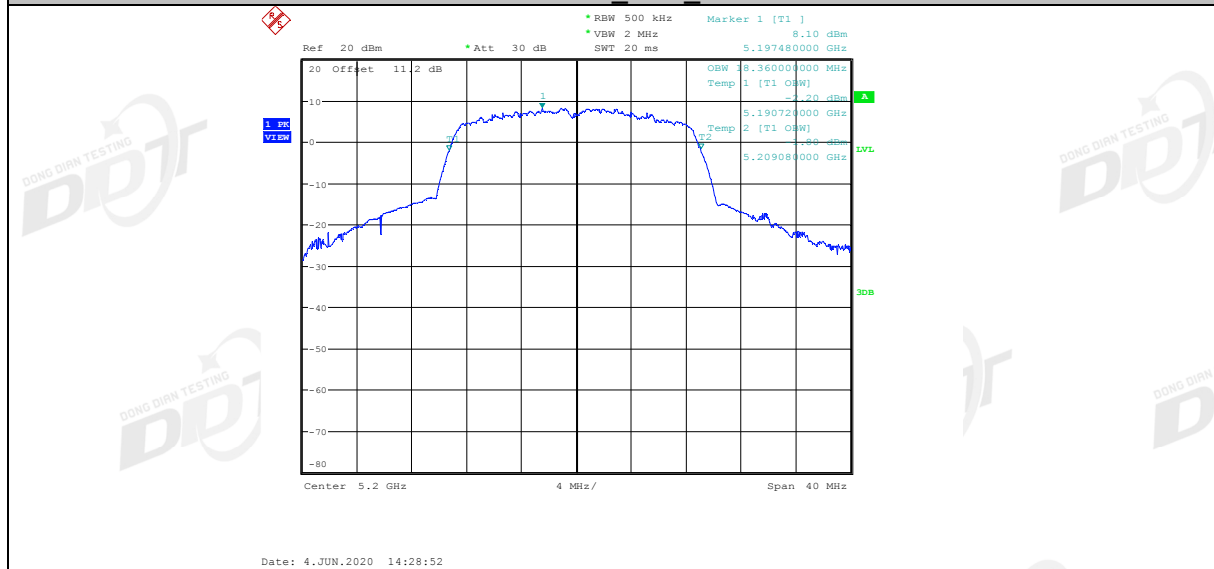
11N20SISO_Ant1_5180



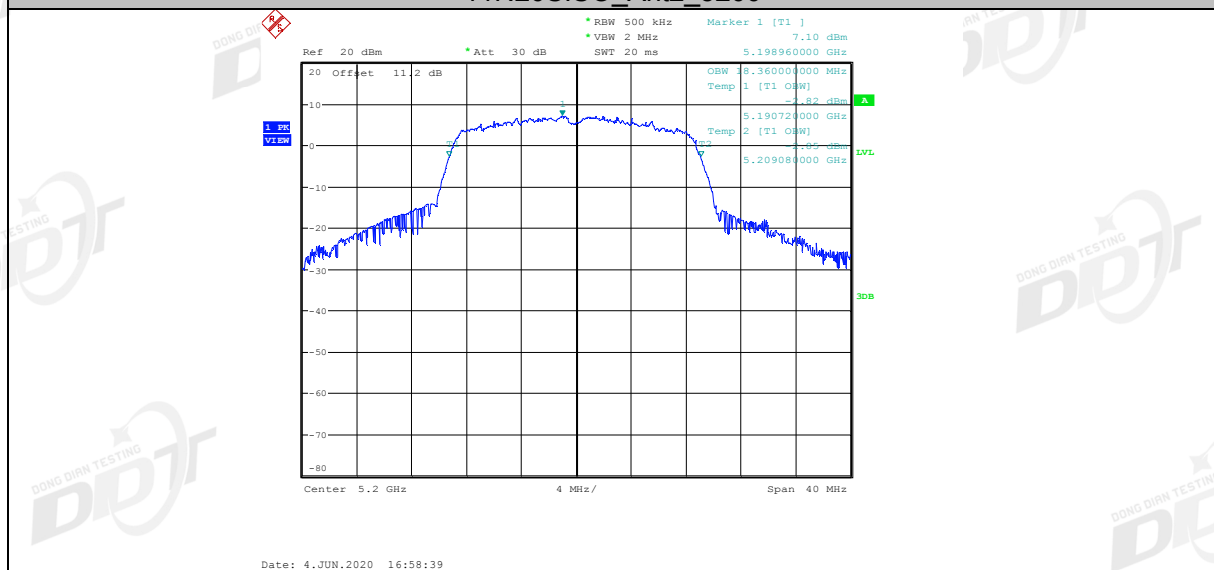
11N20SISO_Ant2_5180



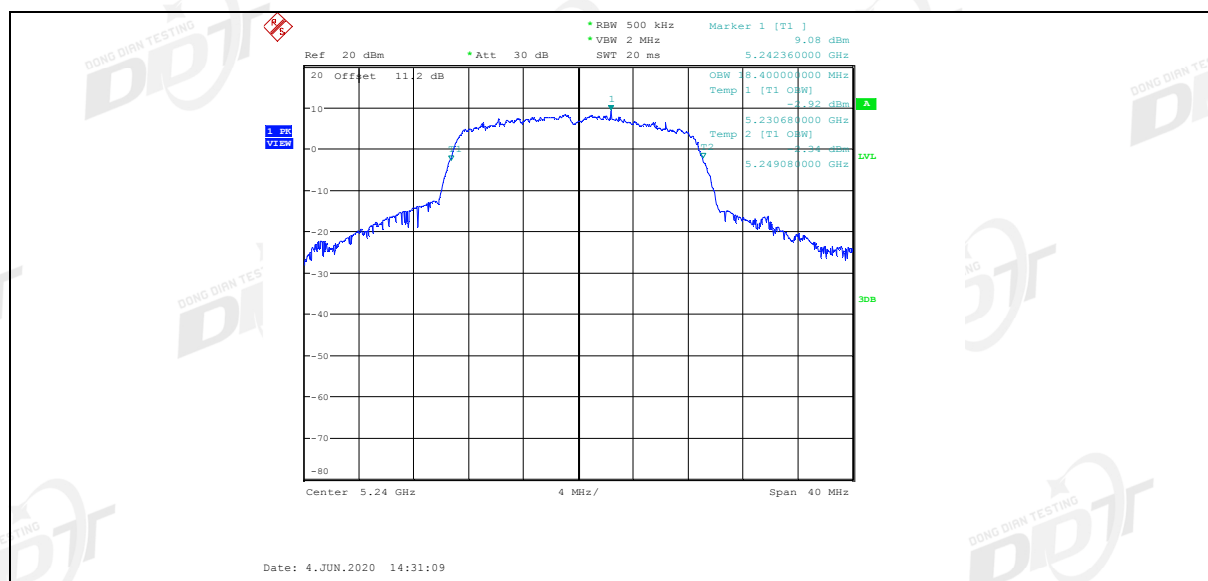
11N20SISO_Ant1_5200



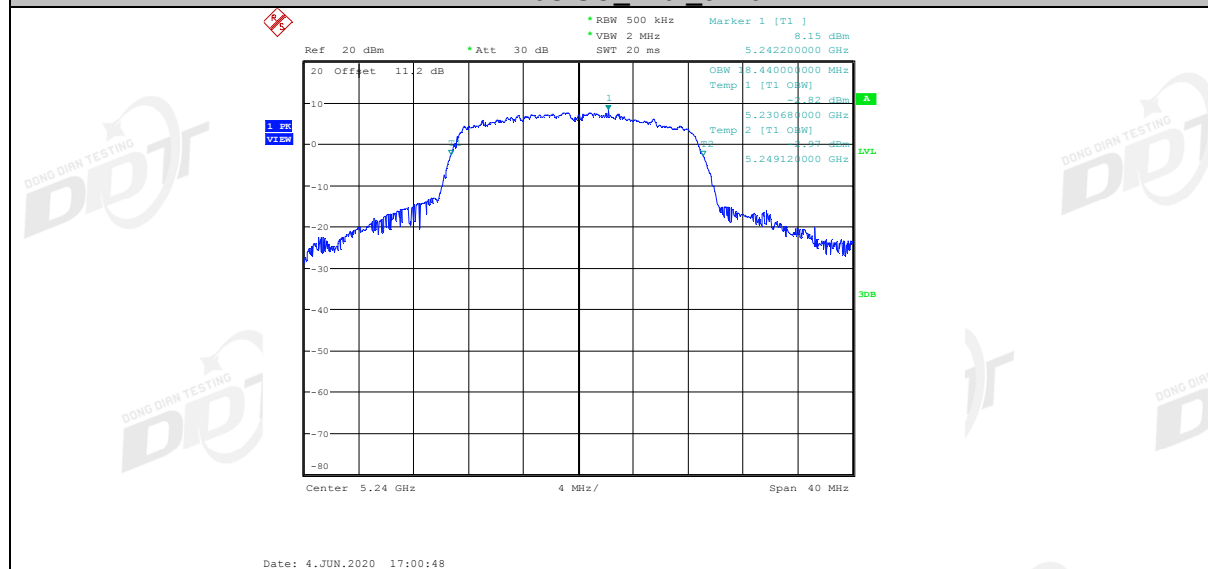
11N20SISO_Ant2_5200



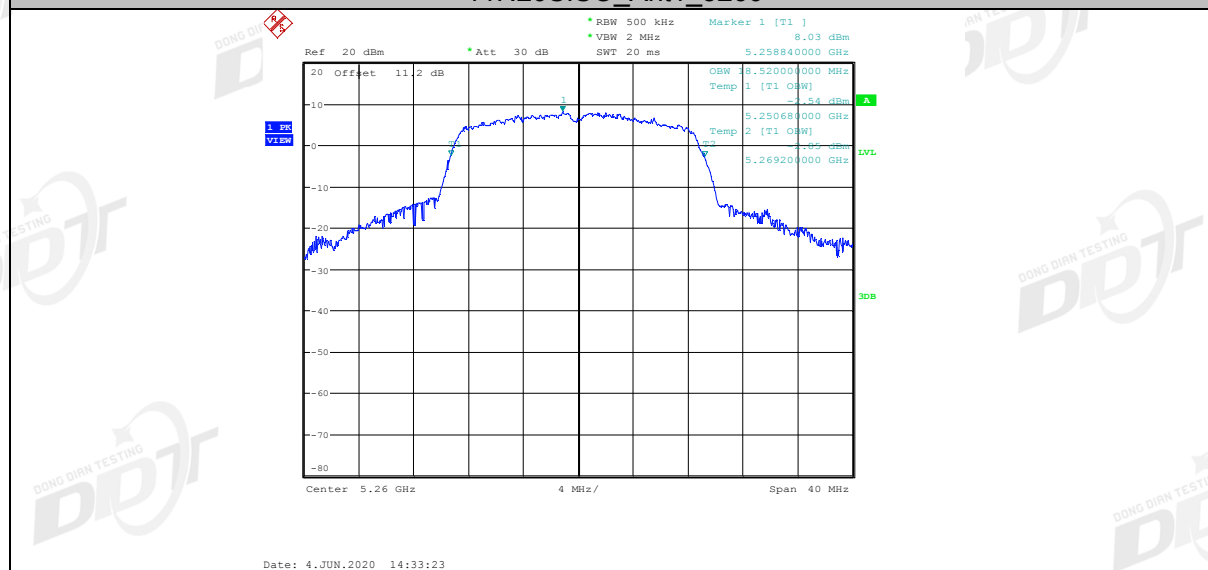
11N20SISO_Ant1_5240



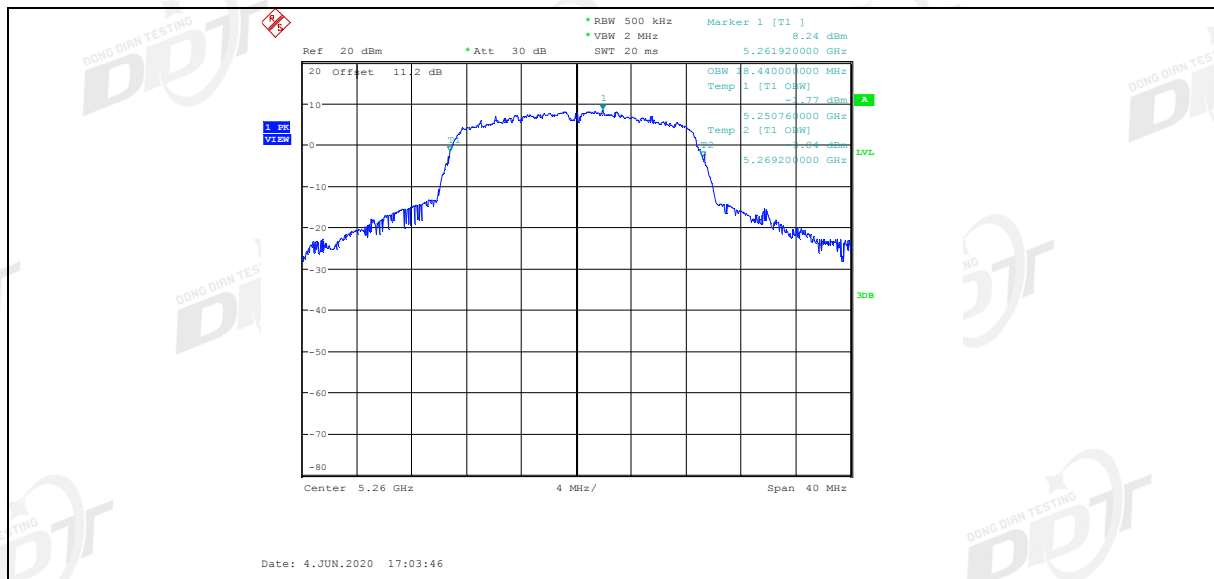
11N20SISO_Ant2_5240



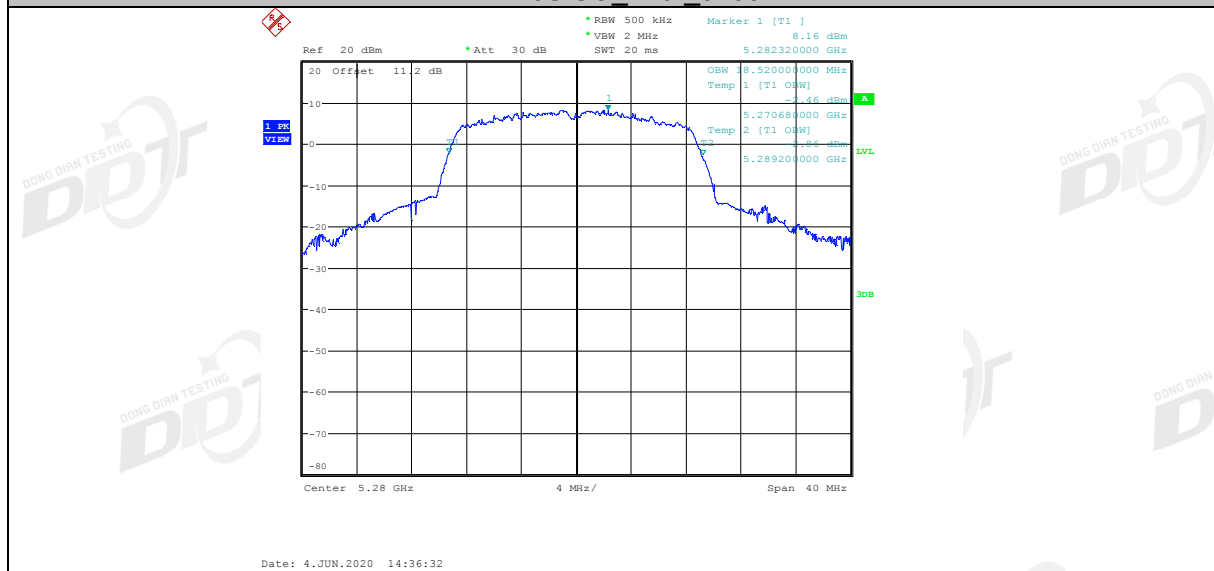
11N20SISO_Ant1_5260



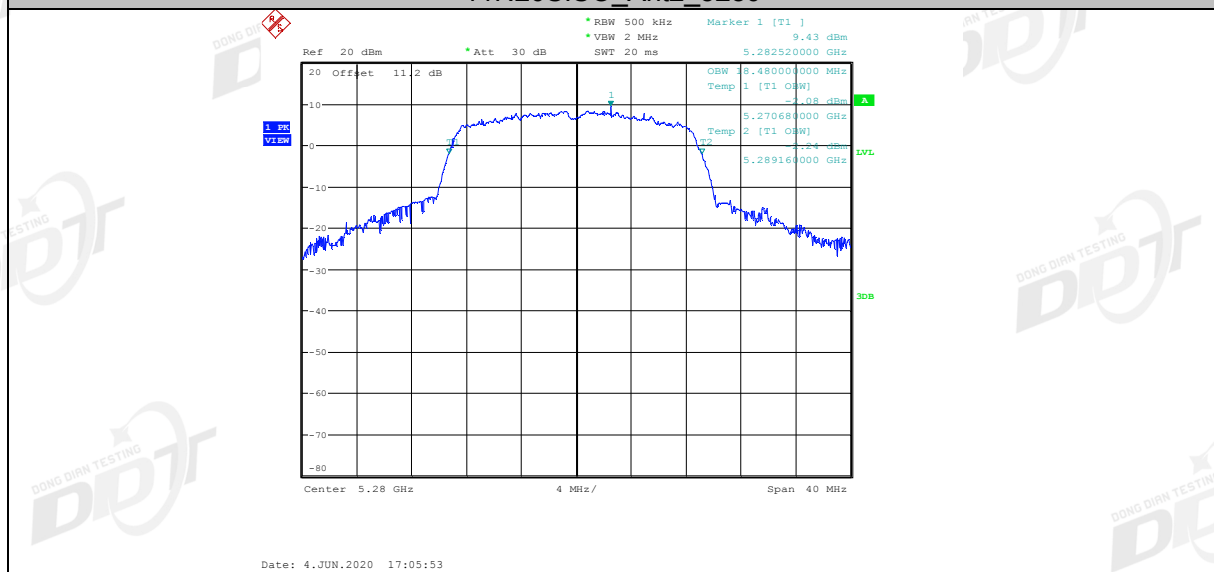
11N20SISO_Ant2_5260



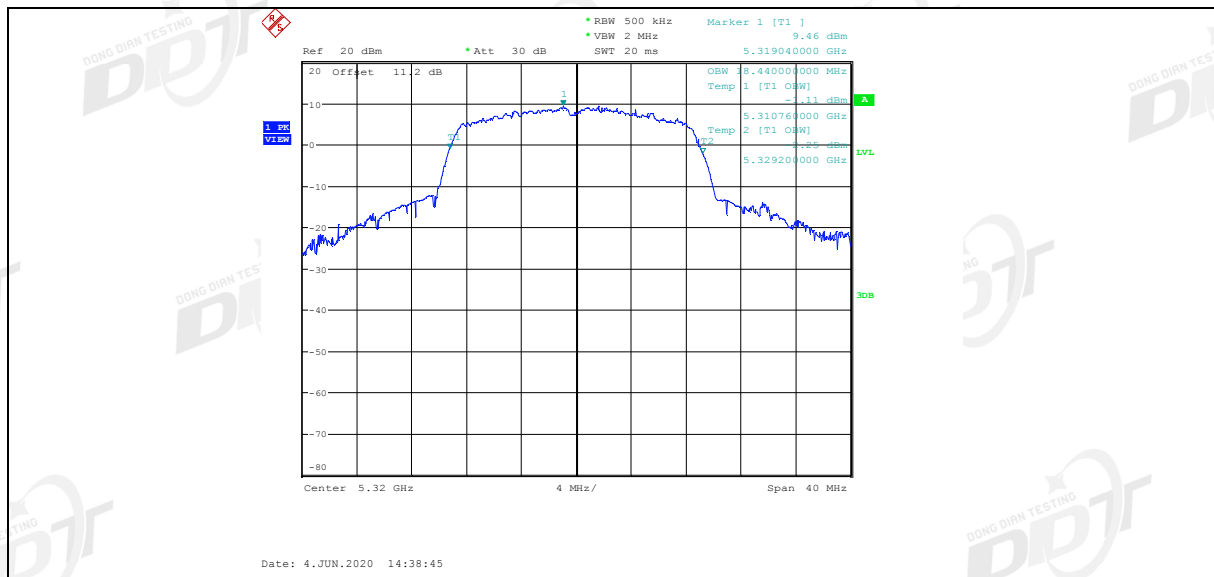
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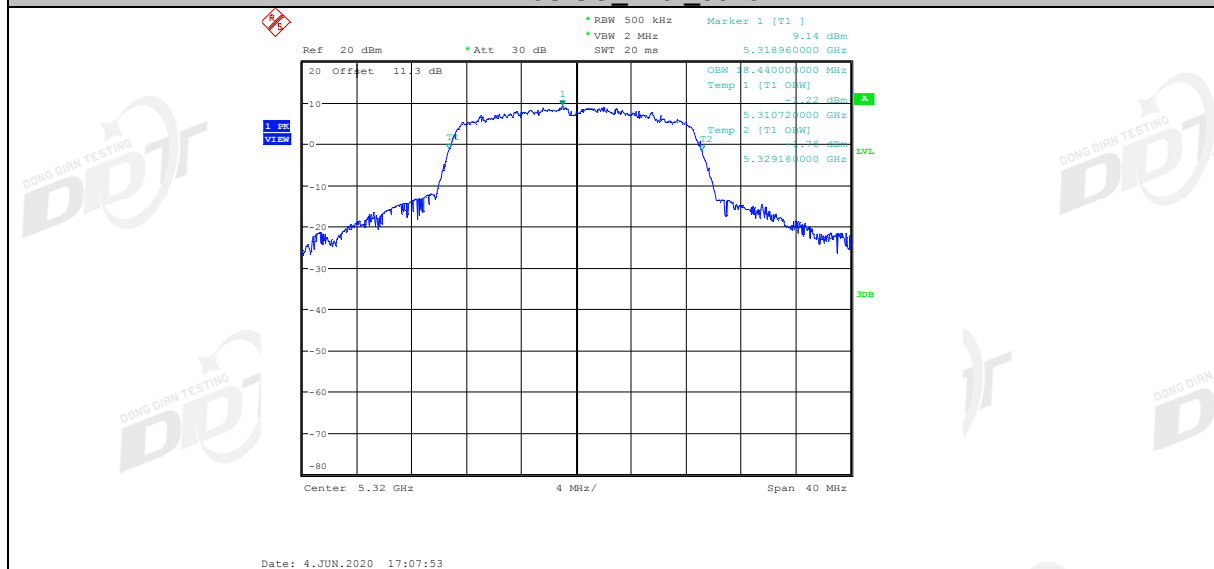
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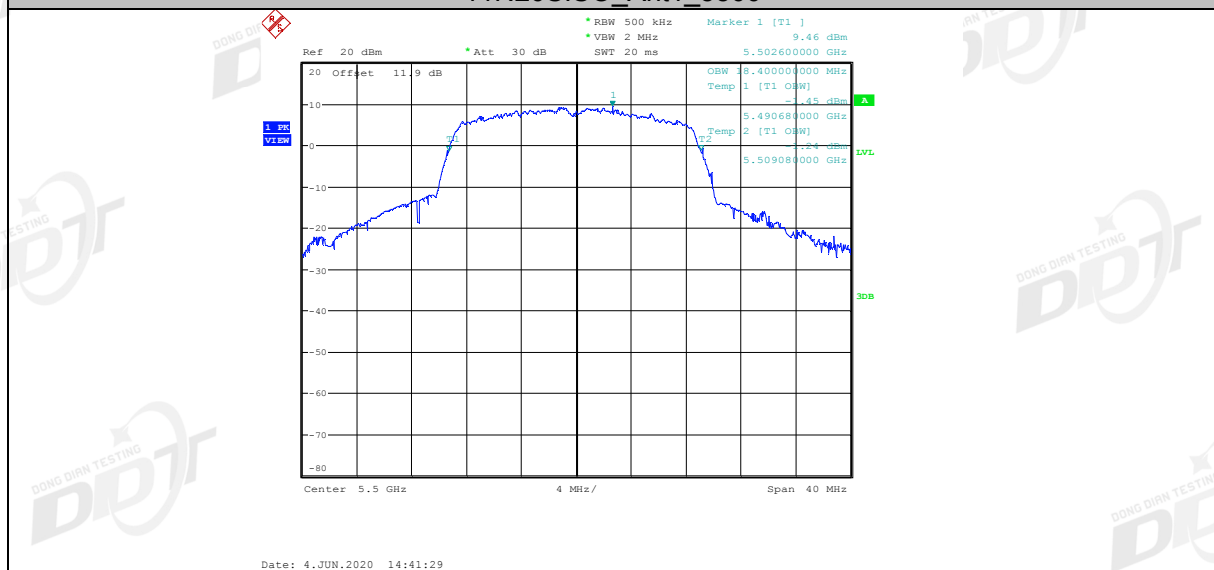
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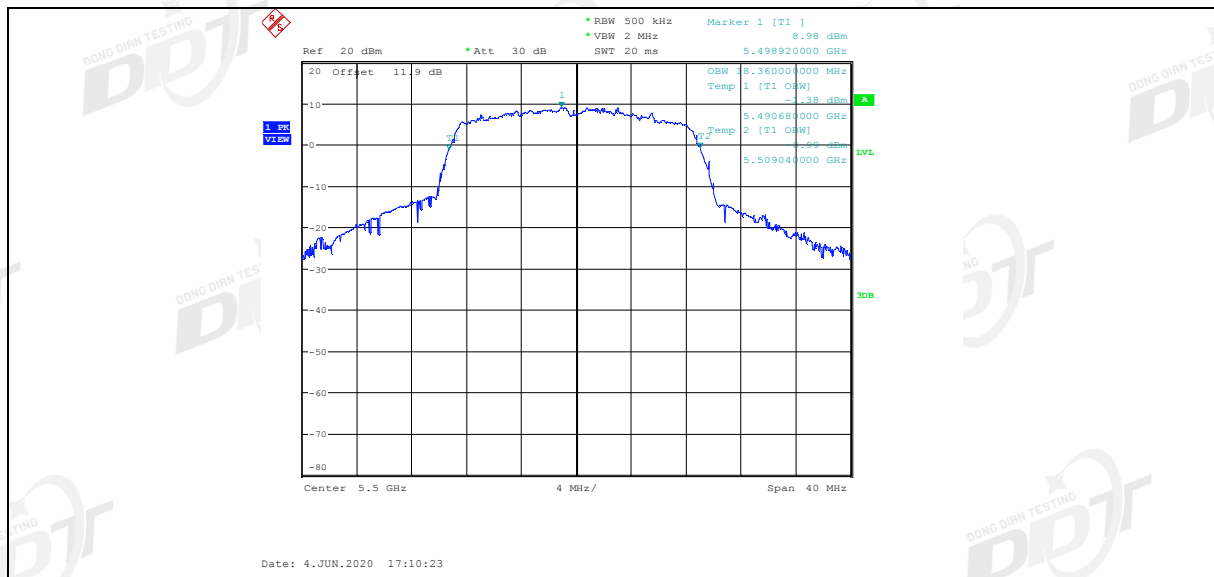
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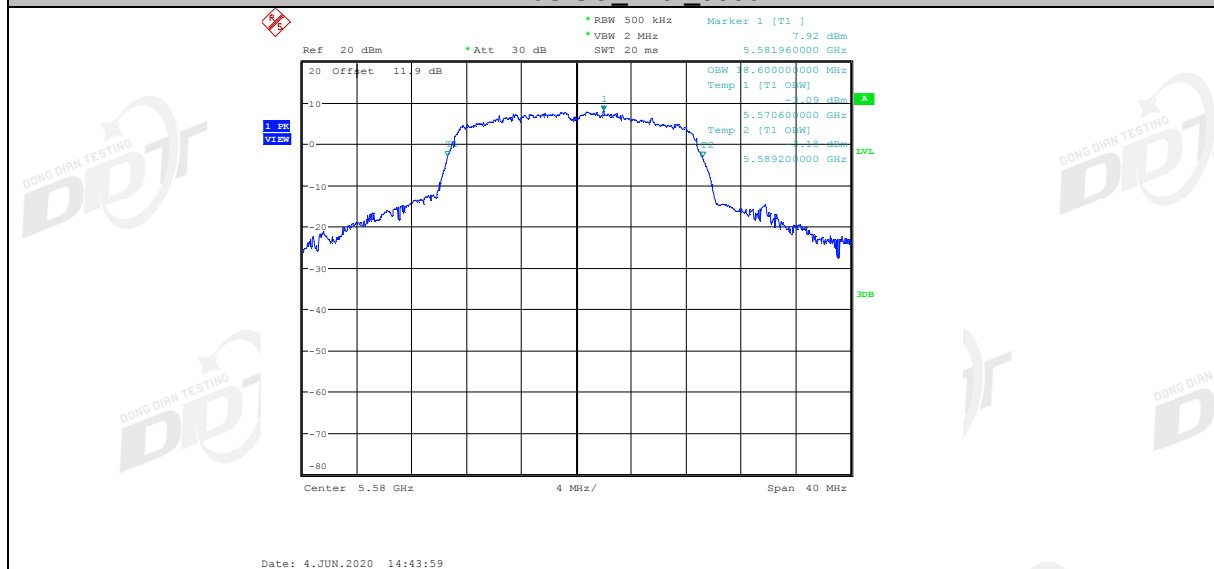
11N20SISO_Ant1_5500



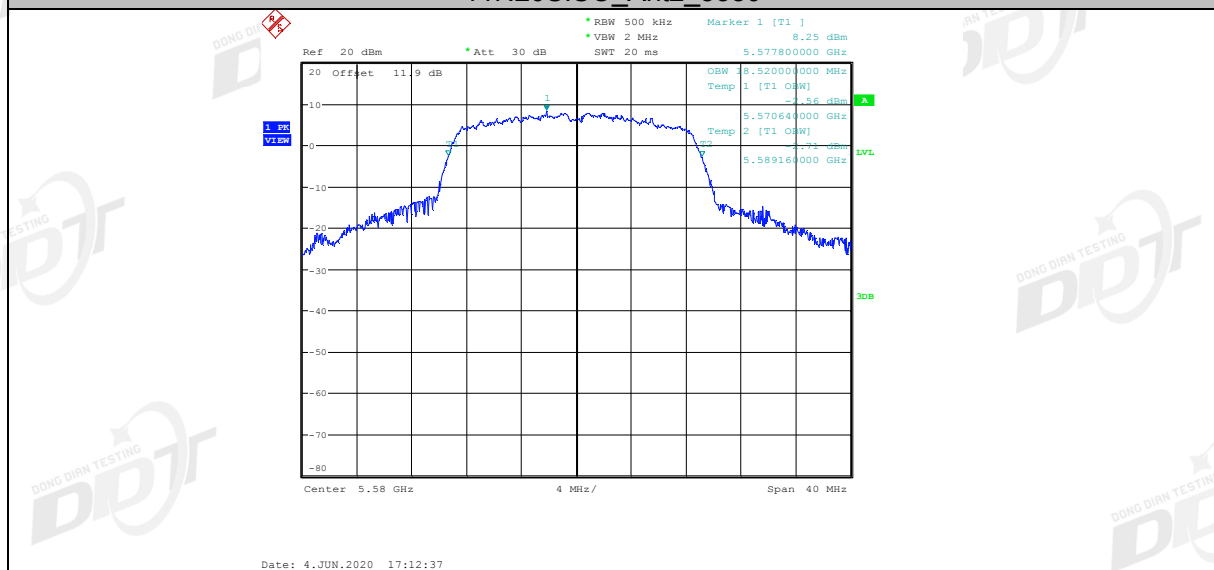
11N20SISO_Ant2_5500



11N20SISO_Ant1_5580



11N20SISO_Ant2_5580



11N20SISO_Ant1_5700



Ref 20 dBm *Att: 30 dB RBW 500 kHz VBW 2 MHz SWT 20 ms Marker 1 [T1] 5.57 dBm

20 Offset 11.4 dB 0BW 58.36000000 MHz Temp 1 [T1 OBW] -1.42 dBm

-10 5.690760000 GHz Temp 2 [T1 OBW] -1.63 dBm

0 5.709120000 GHz

-10 1/2 1 1/2

-20

-30

-40

-50

-60

-70

-80

Center 5.7 GHz 4 MHz/ Span 40 MHz

Date: 4.JUN.2020 17:15:14

RBW 500 kHz VBW 2 MHz SWF 20 ms Att. 30 dB Ref. 20 dBm Marker 1 [T1] 5.746440000 GHz

20 Offset 11.4 dB

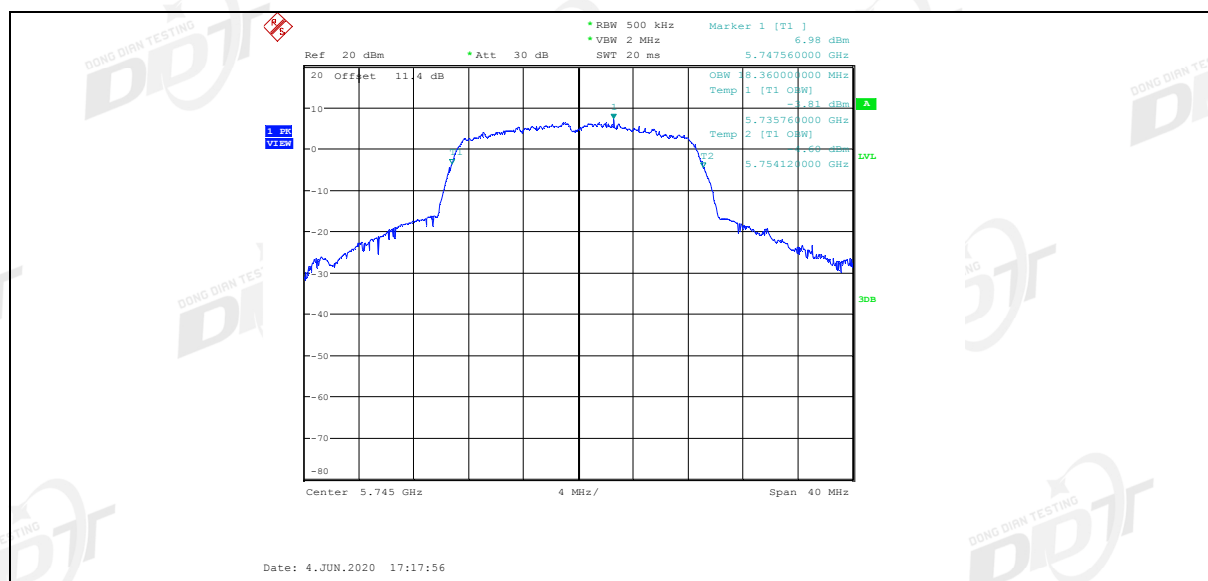
1 dB
VIDE

OBW 28.320000000 MHz
Temp 1 [T1 OBW] -0.02 dBm
5.735800000 GHz
Temp 2 [T1 OBW] -0.91 dBm
5.754120000 GHz

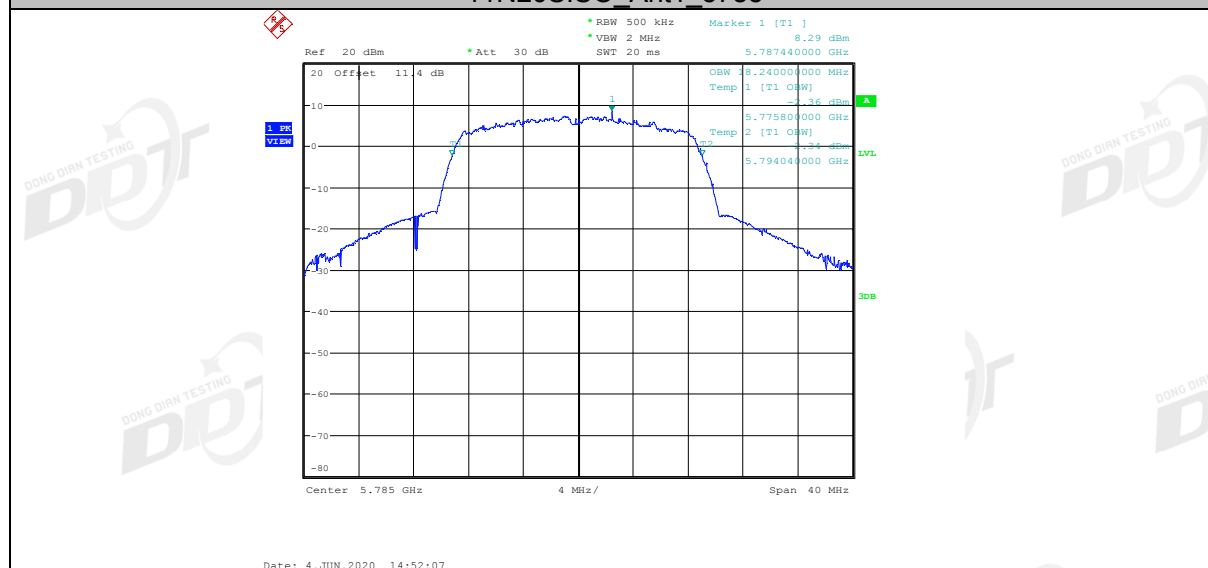
Center 5.745 GHz 4 MHz/ Span 40 MHz

Date: 4.JUN.2020 14:48:59

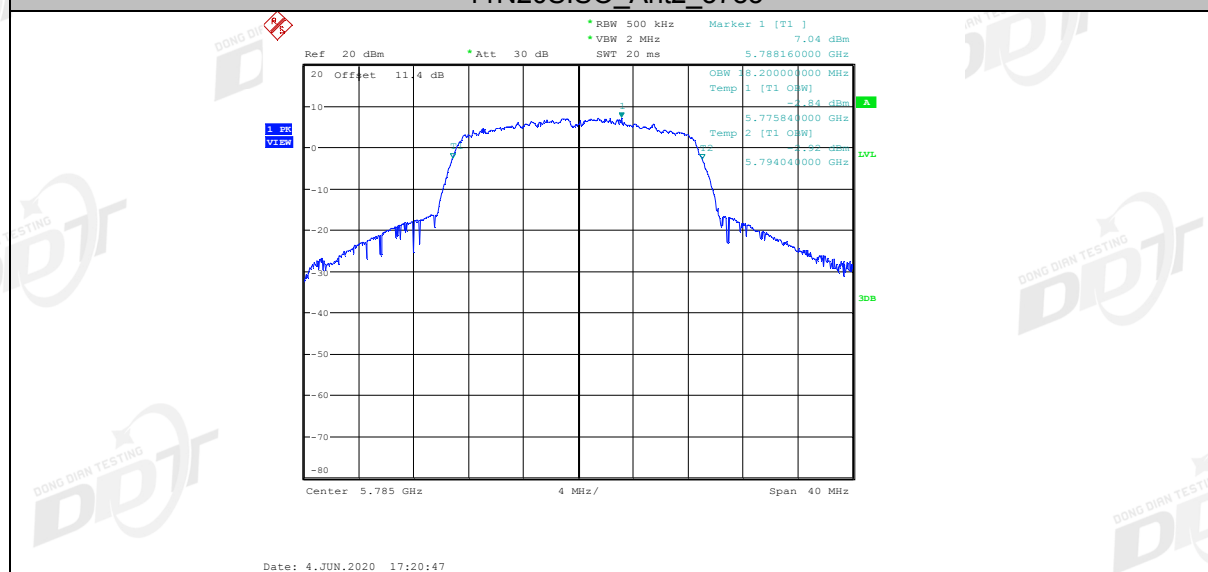
11N20SISO Ant2 5745



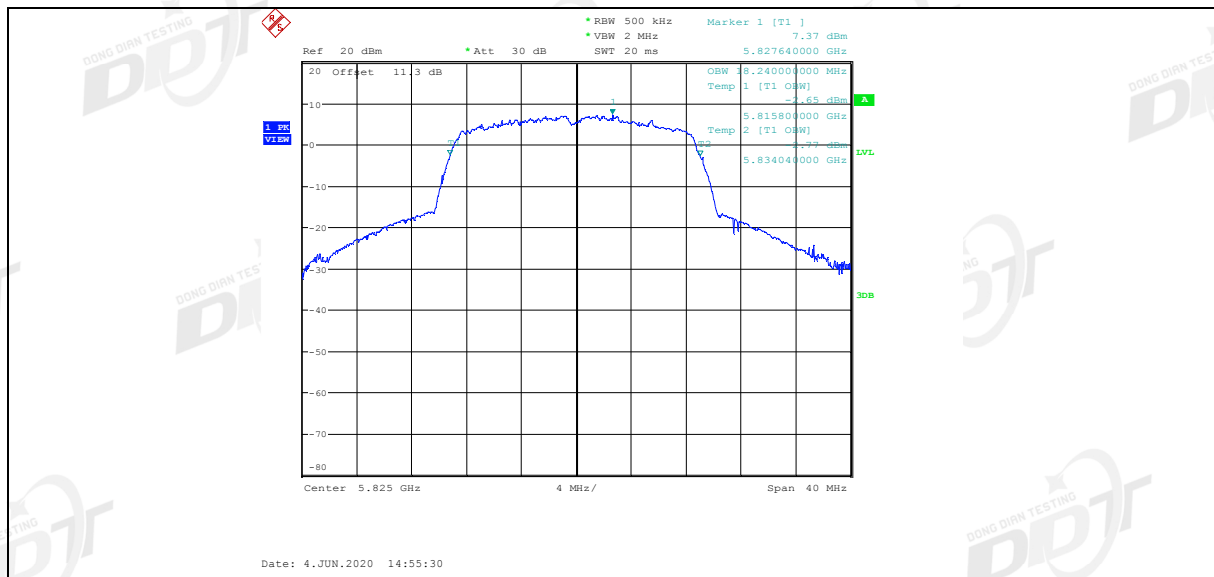
11N20SISO_Ant1_5785



11N20SISO_Ant2_5785



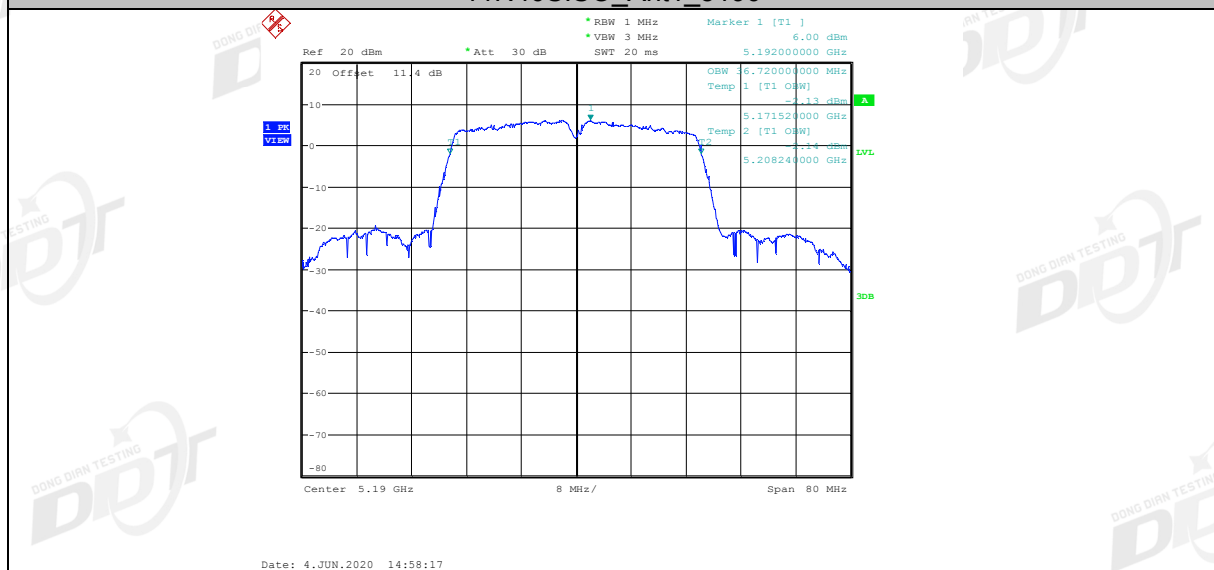
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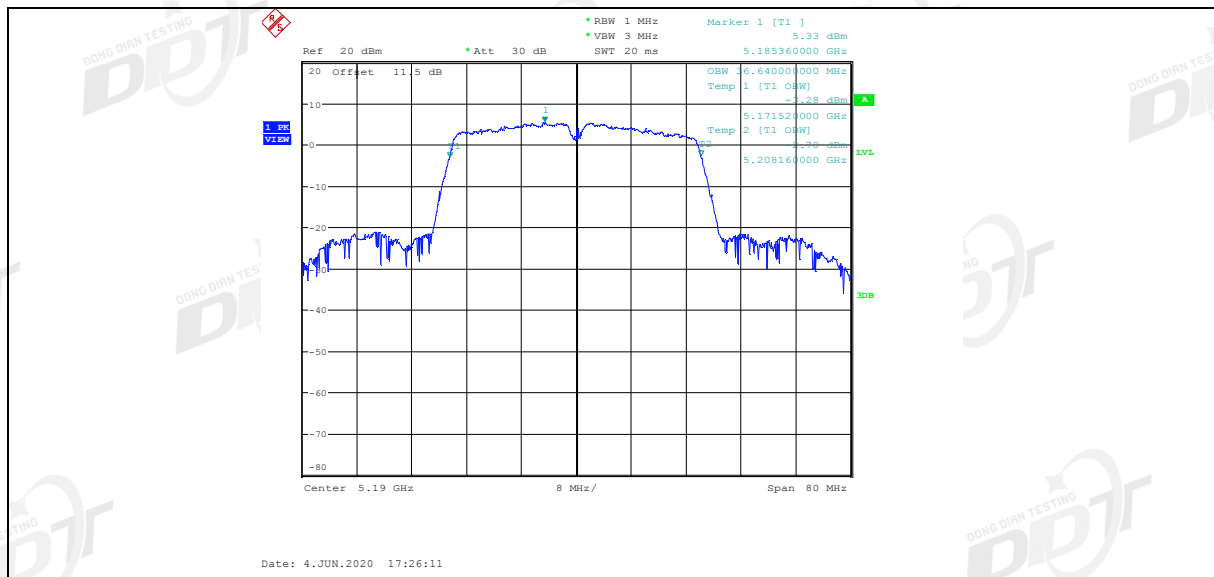
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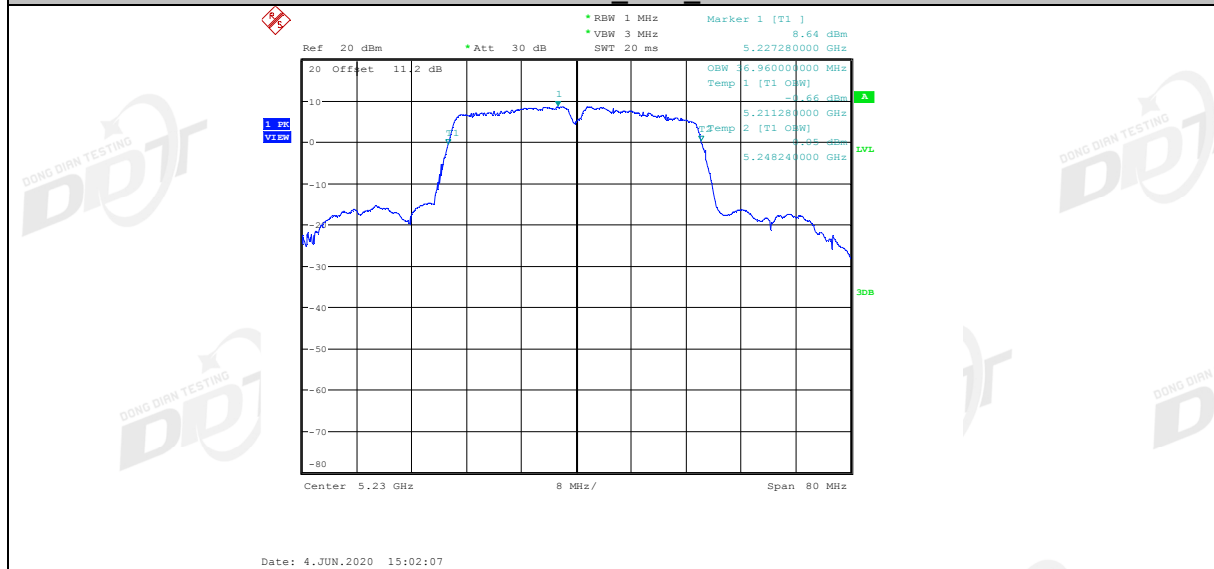
11N40SISO_Ant1_5190



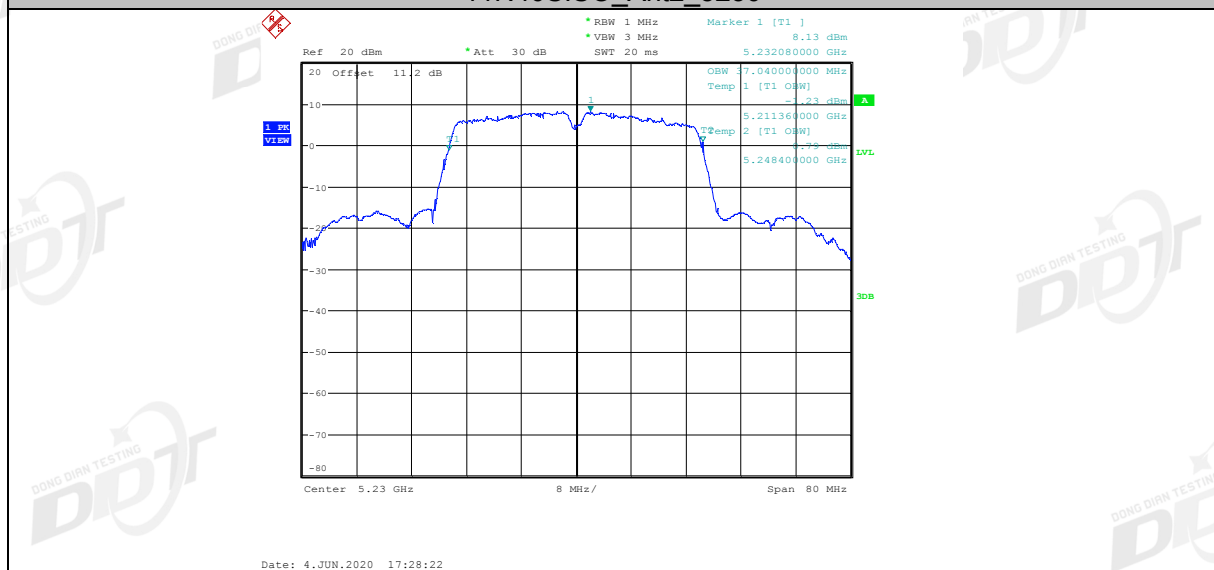
11N40SISO_Ant2_5190



11N40SISO_Ant1_5230



11N40SISO_Ant2_5230



11N40SISO_Ant1_5270



RBW 1 MHz
 VBW 3 MHz
 SWF 20 ms
 Marker 1 [T1]
 9.30 dBm
 5.264240000 GHz

Ref 20 dBm
 *Att 30 dB

20 Offset 11.2 dB
 -10
 0
 -10
 -30
 -40
 -50
 -60
 -70
 -80

5.27 GHz
 5.251440000 GHz
 5.288480000 GHz

OBW
 Temp
 1 [T1 OBW]
 5.251440000 GHz
 2 [T1 OBW]
 5.288480000 GHz

Center 5.27 GHz
 8 MHz/
 Span 80 MHz

Date: 4.JUN.2020 17:30:25

The image shows a spectrum plot with a blue trace. The x-axis is labeled 'Center 5.31 GHz' and 'Span 80 MHz'. The y-axis is labeled 'dBm' and ranges from -80 to 20. The plot shows a signal with a peak at 5.31 GHz. The peak is labeled '1' and has a value of 11.2 dB. The plot also shows a noise floor at approximately -20 dBm. The plot is titled 'Ref 20 dBm' and 'Att 30 dB'. The plot also shows 'RBW 1 MHz', 'VBW 3 MHz', and 'SWF 20 ms'. The plot also shows 'Marker 1 [T1]' and '7.44 dBm'. The plot also shows '5.313600000 GHz' and '5.291360000 GHz'.

Ref 20 dBm *Att 30 dB Marker 1 [T1] 7.44 dBm

RBW 1 MHz VBW 3 MHz SWF 20 ms 5.313600000 GHz

20 Offset 11.2 dB

11.2 dB

1

OBW 37.28000000 MHz

Temp 1 [T1] 0.33 dBm

5.291360000 GHz

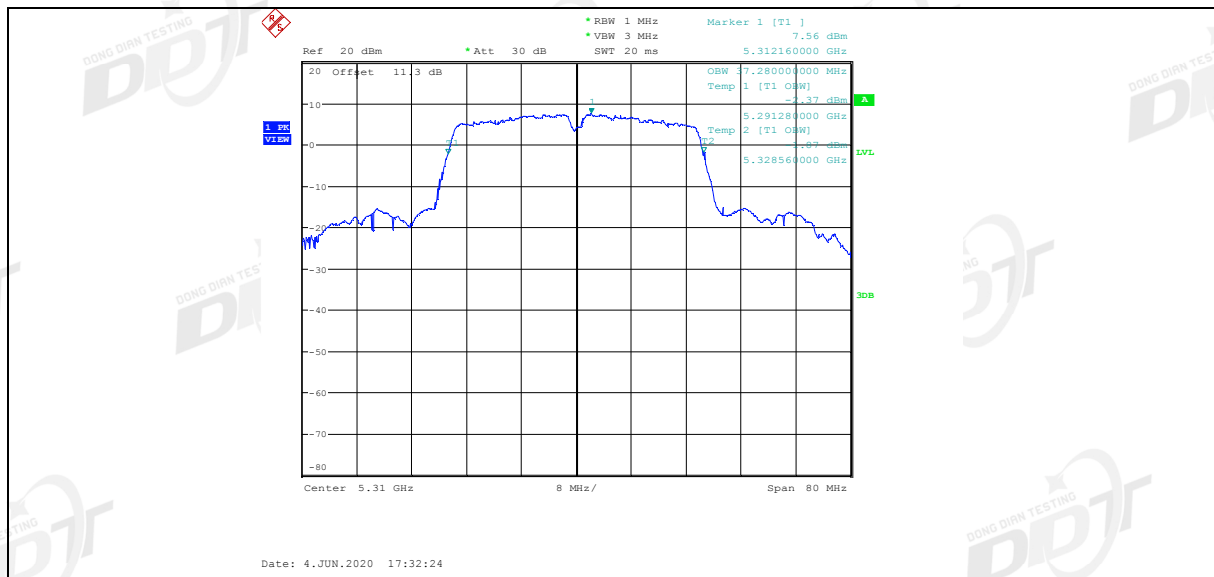
Temp 2 [T1] 0.33 dBm

5.328640000 GHz

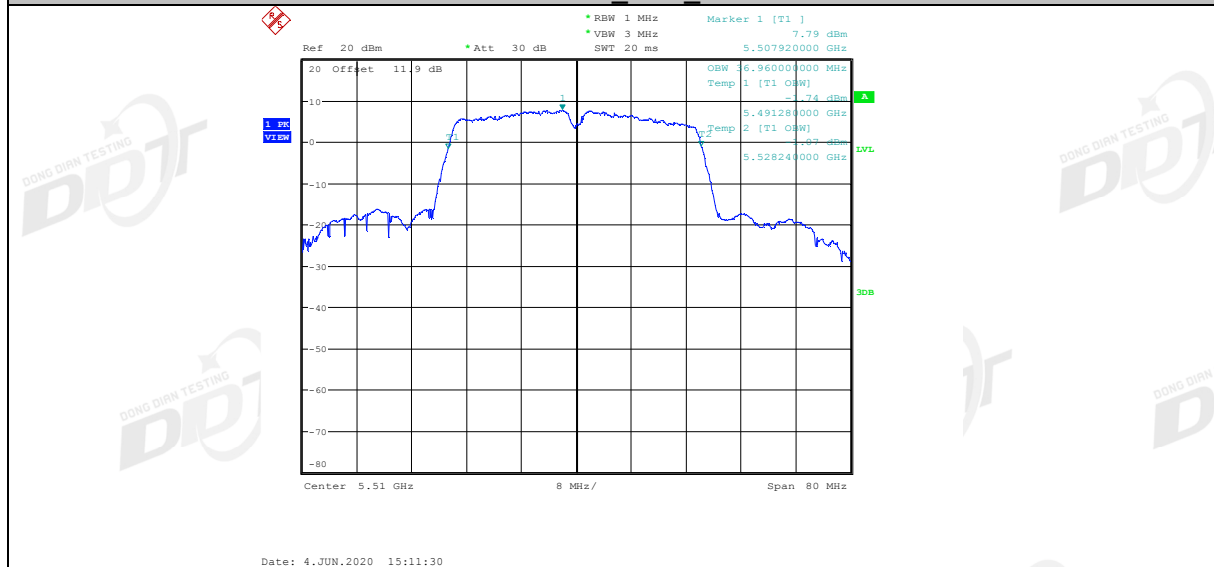
Center 5.31 GHz 8 MHz/ Span 80 MHz

Date: 4.JUN.2020 15:06:50

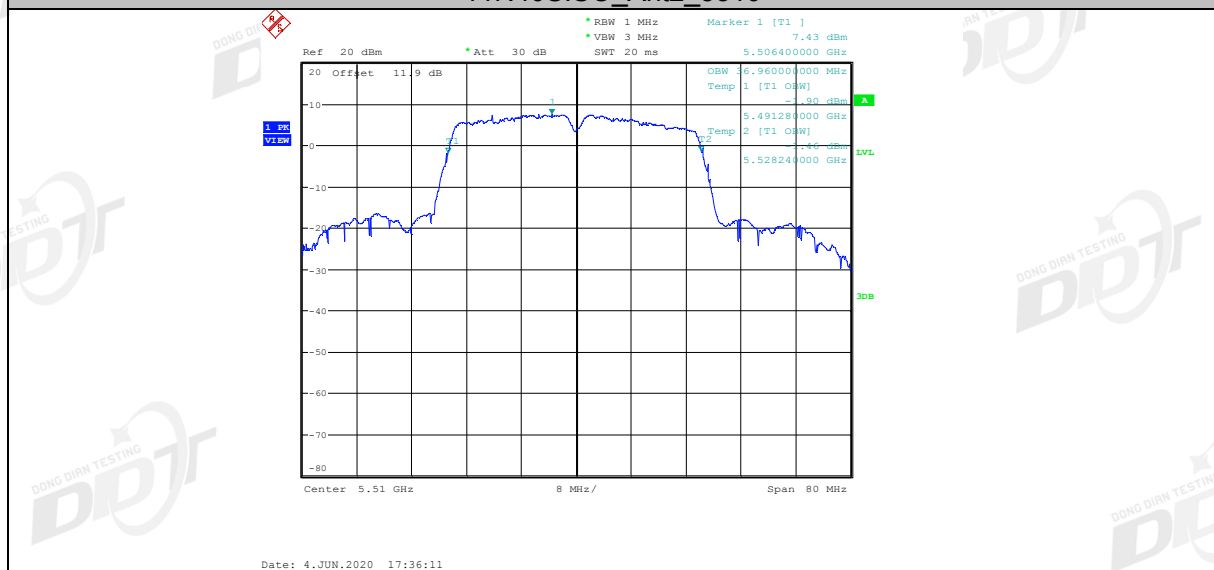
11N40SISO Ant2 5310



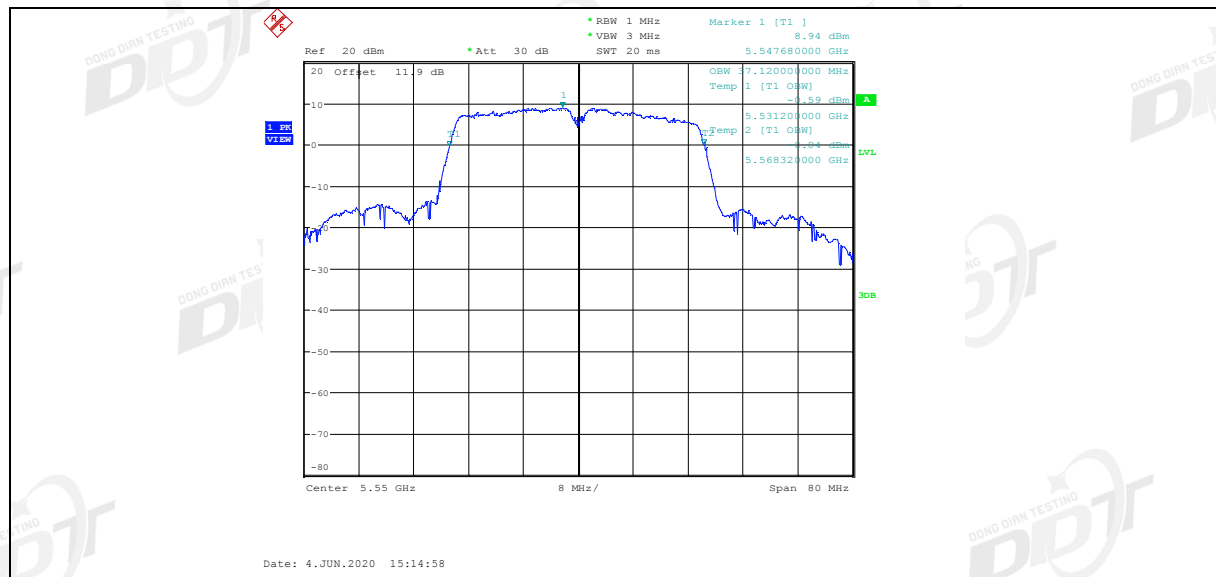
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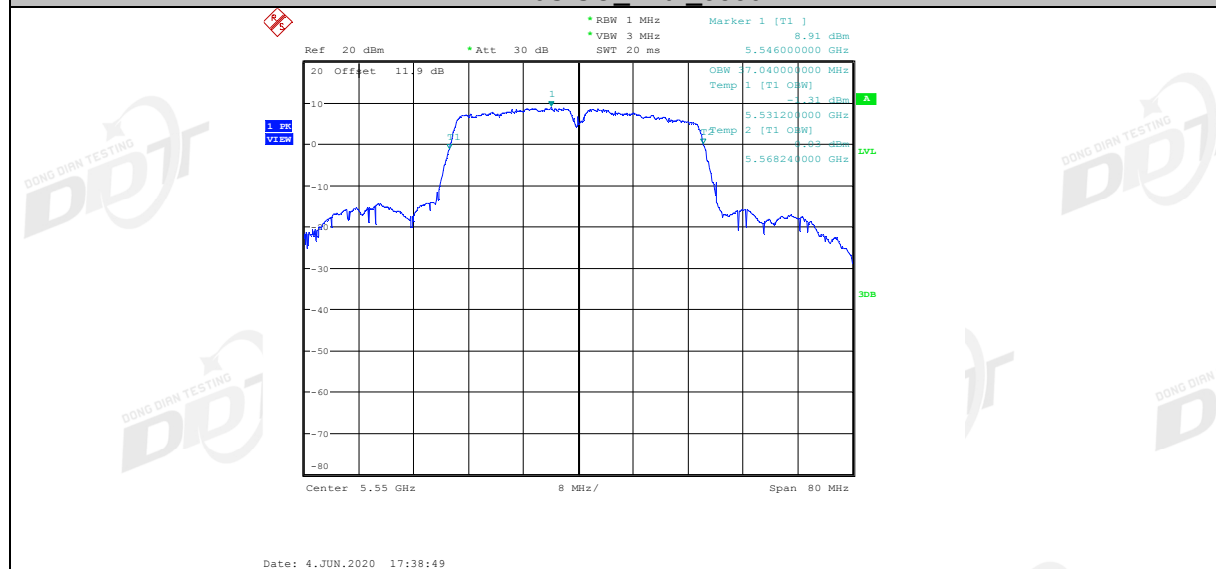
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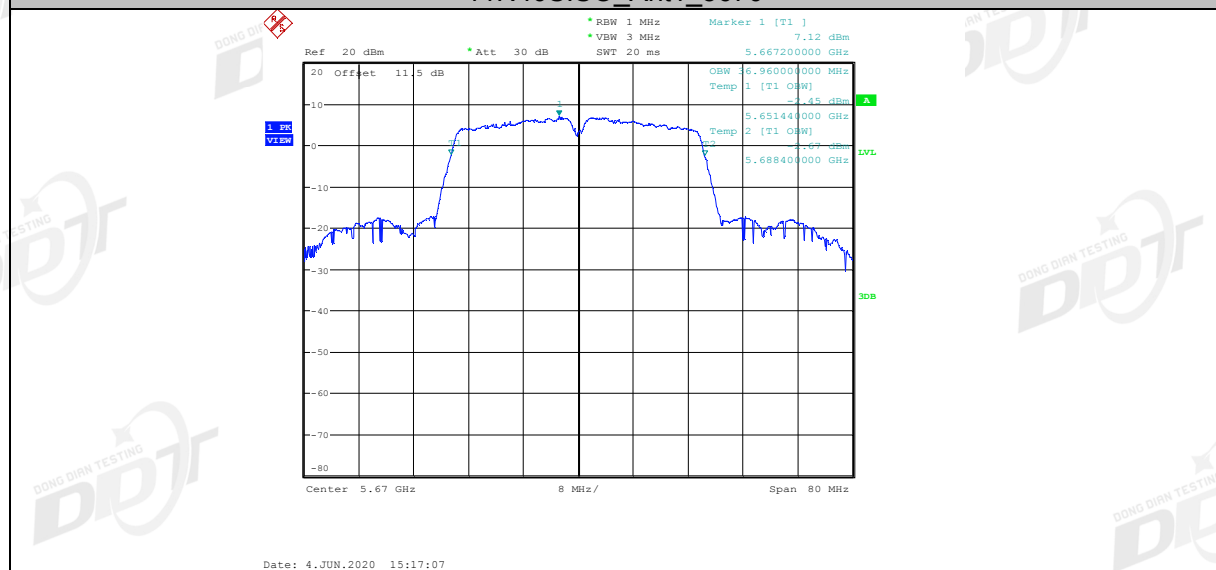
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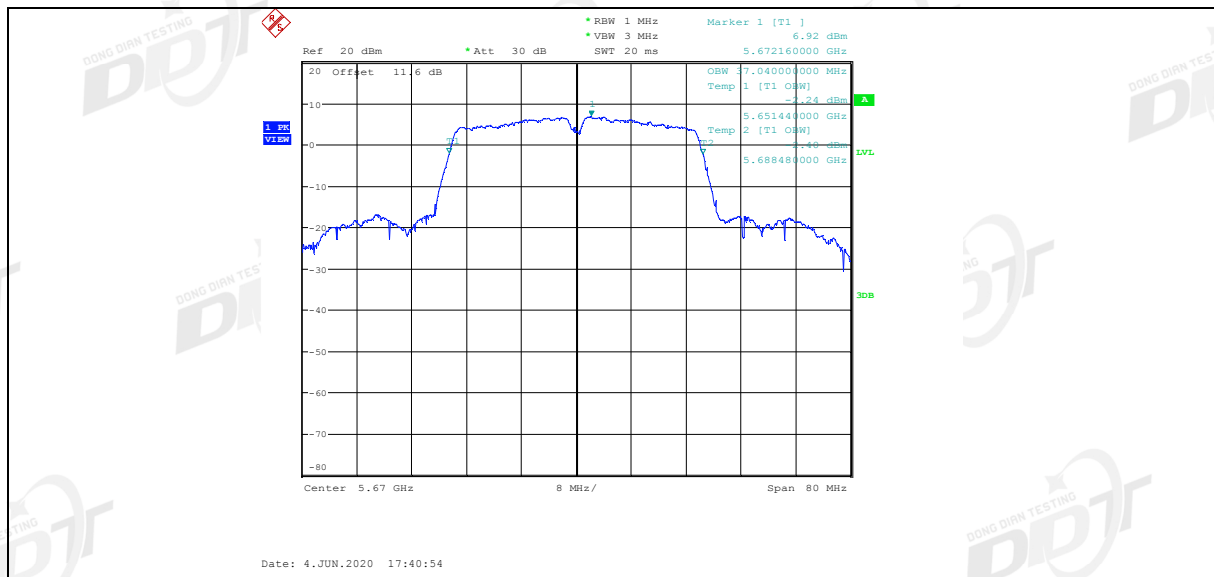
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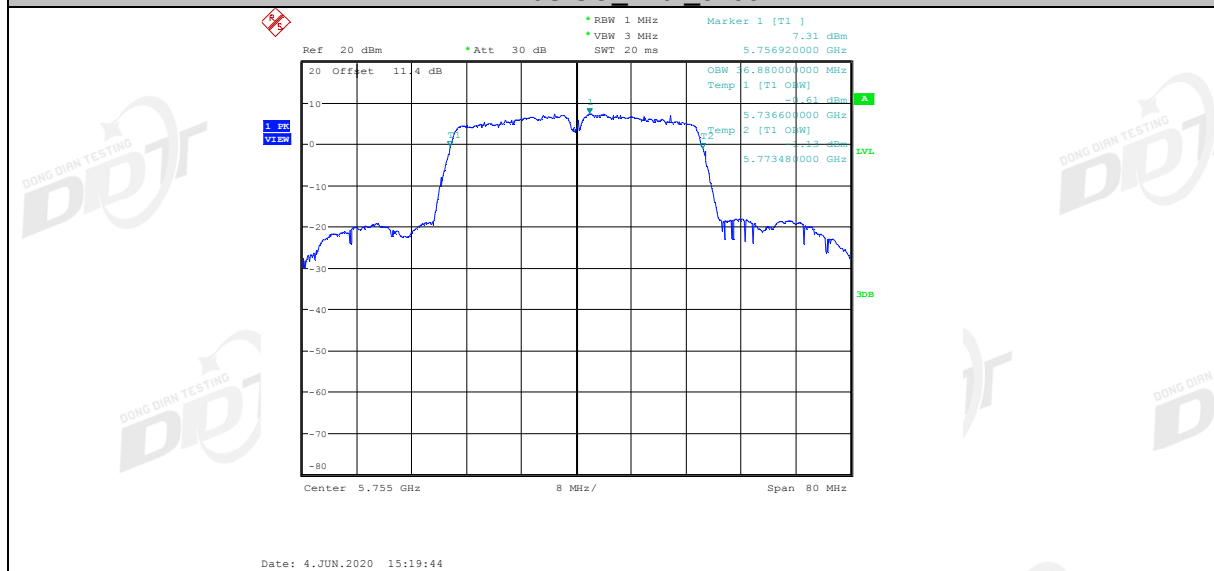
11N40SISO_Ant1_5670



11N40SISO_Ant2_5670



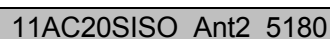
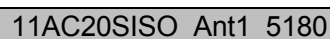
11N40SISO_Ant1_5755

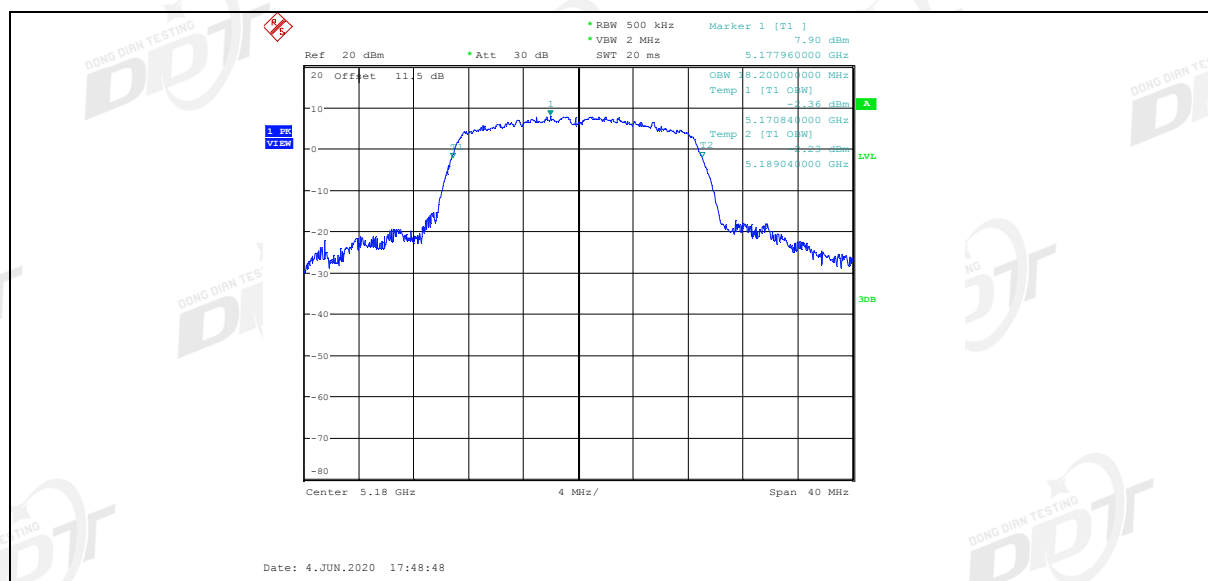


11N40SISO_Ant2_5755

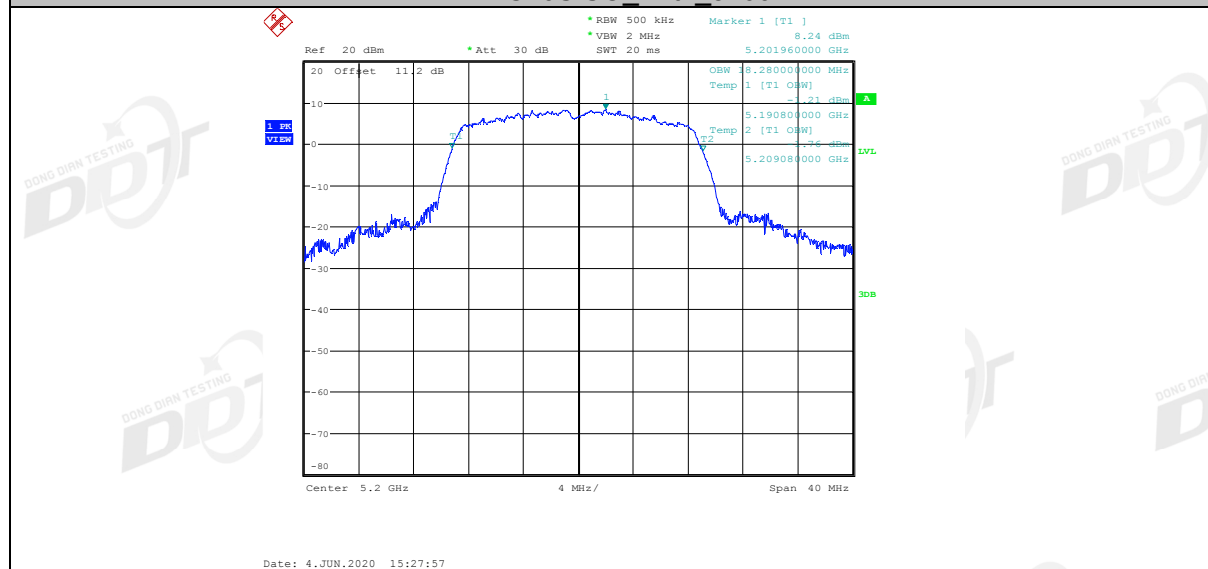


11N40SISO_Ant1_5795

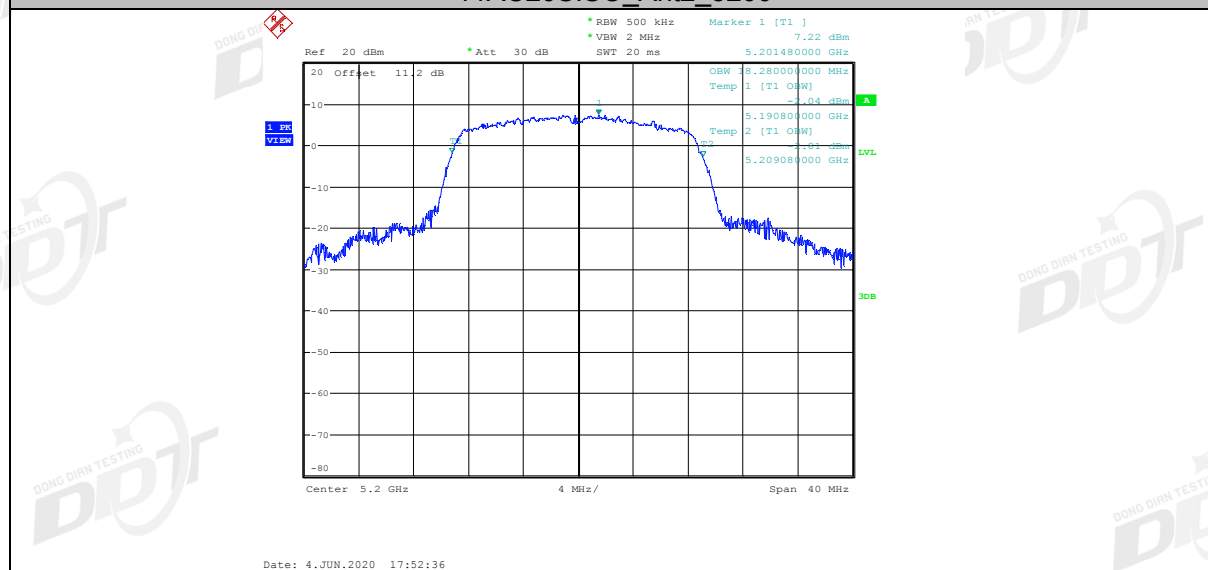




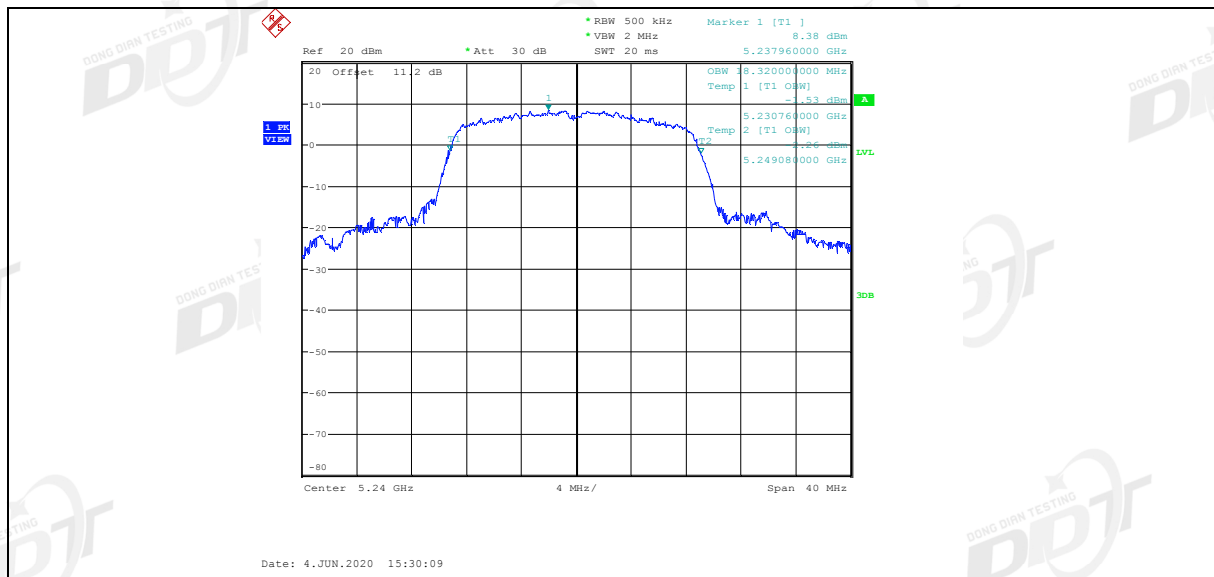
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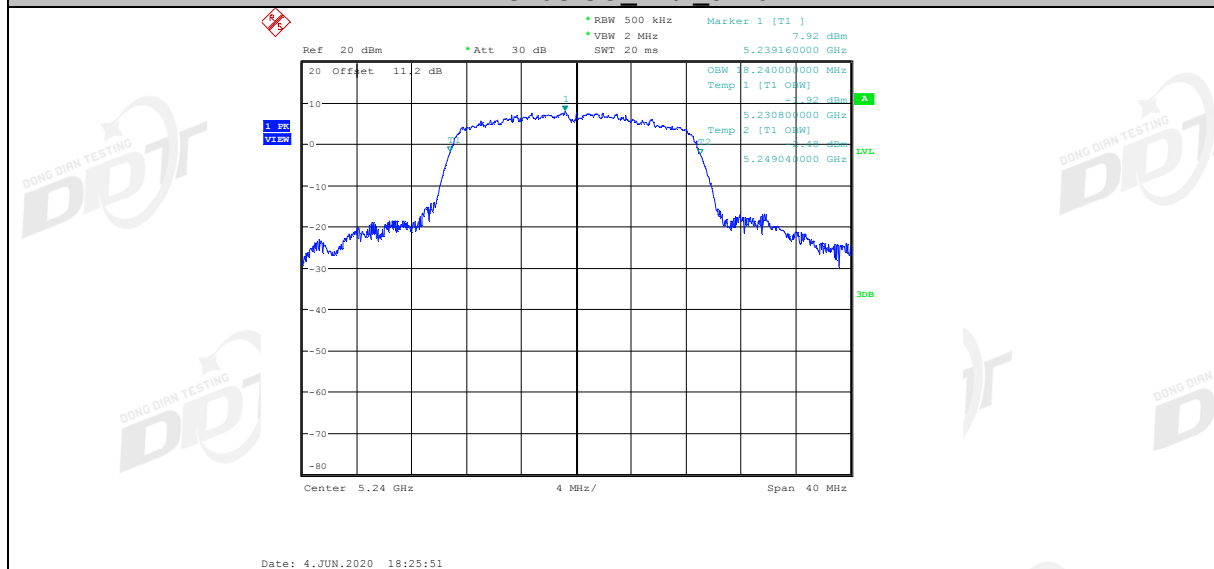
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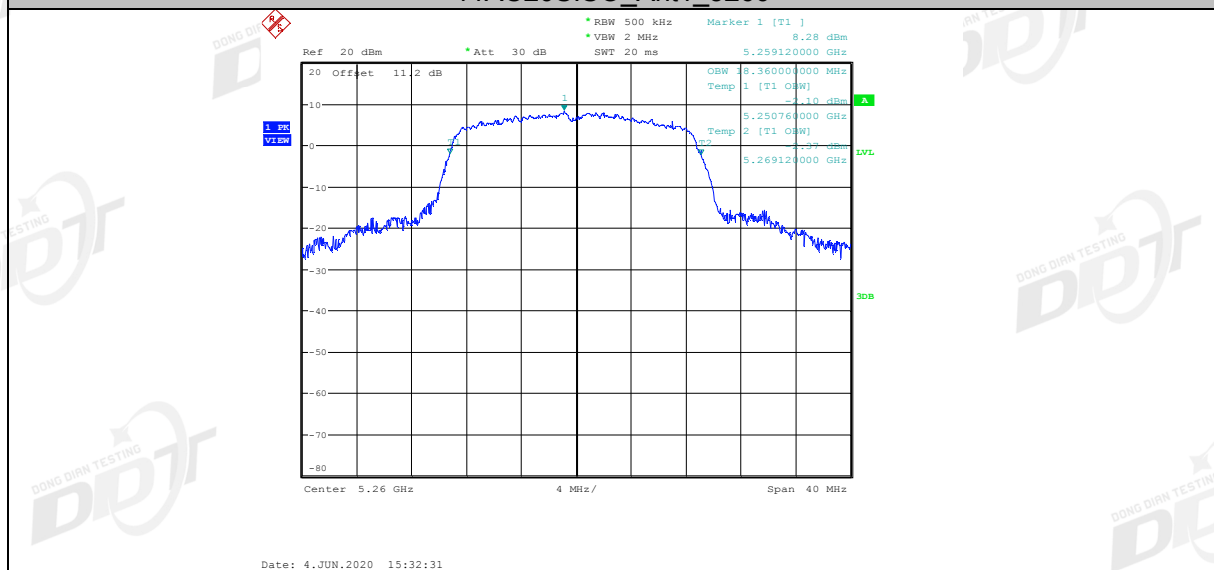
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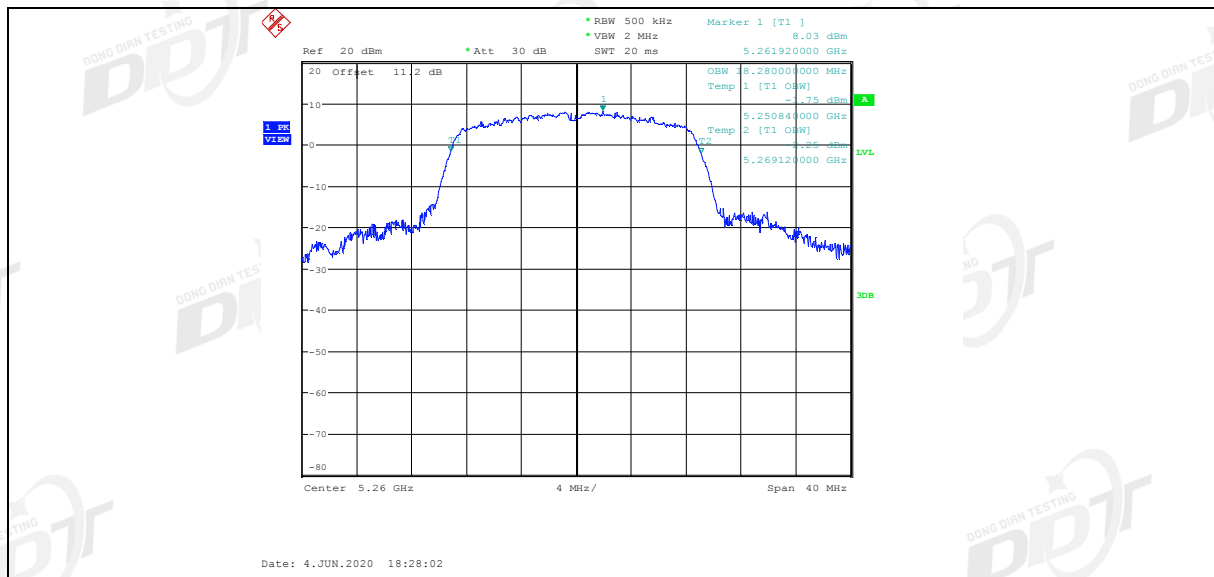
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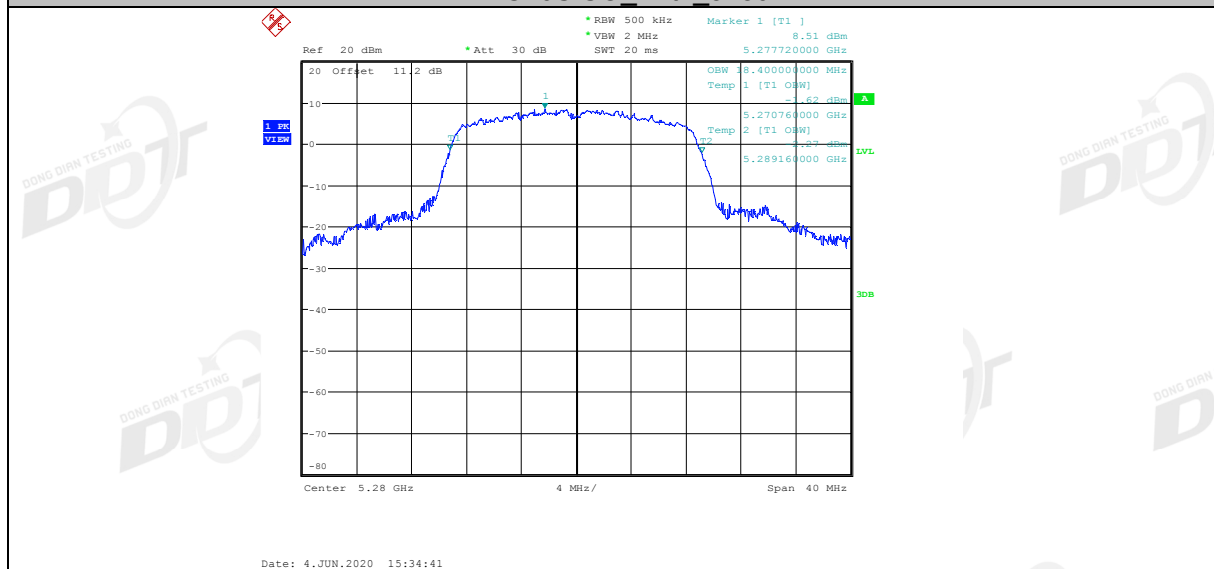
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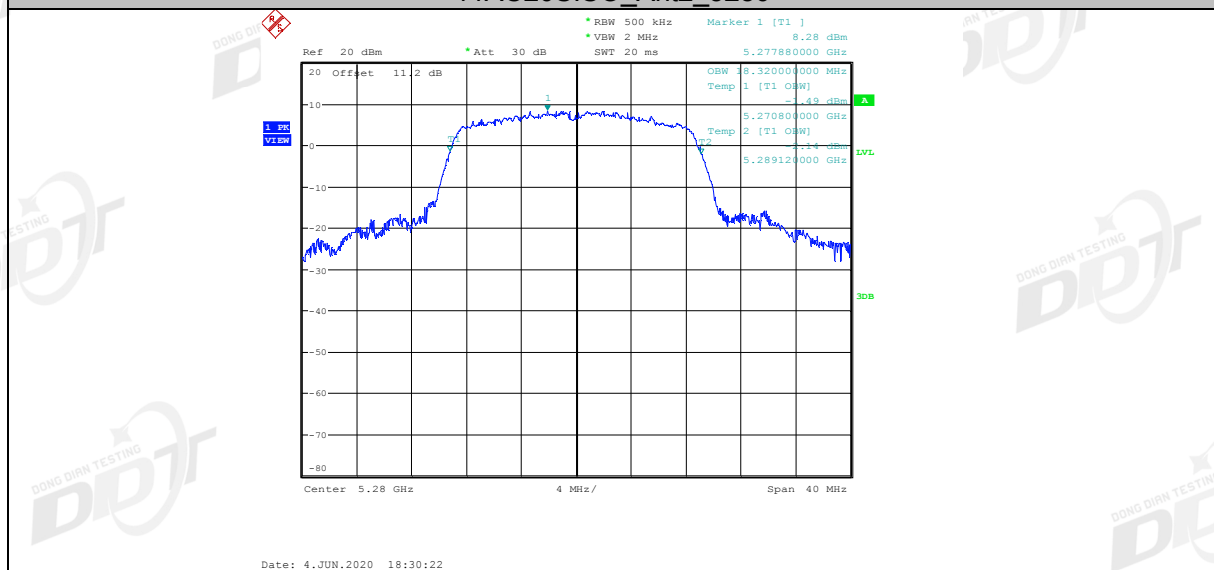
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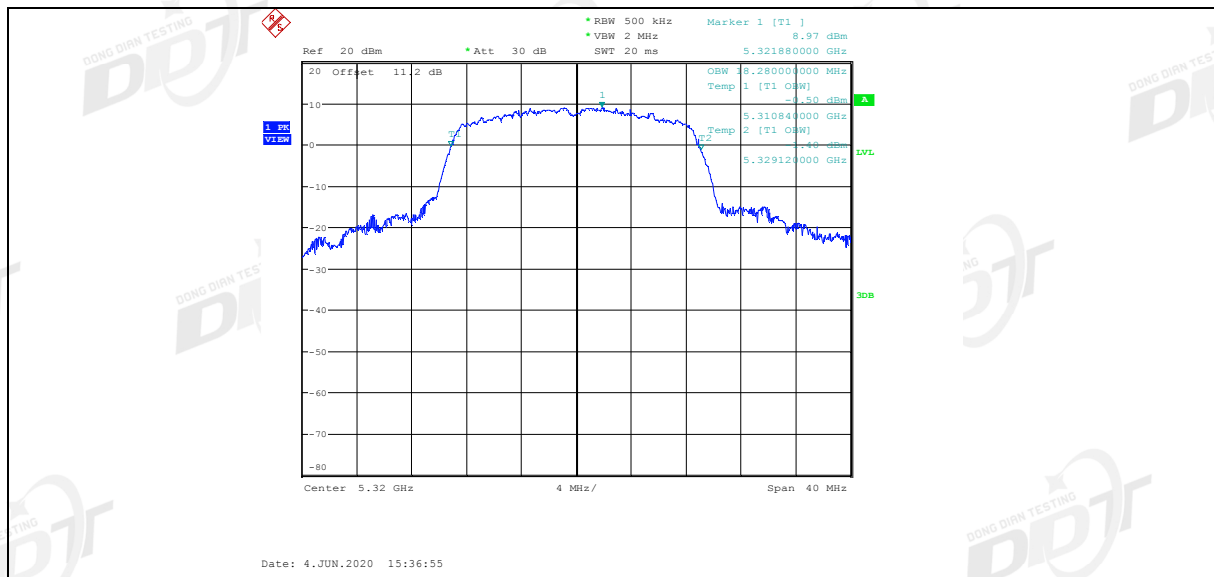
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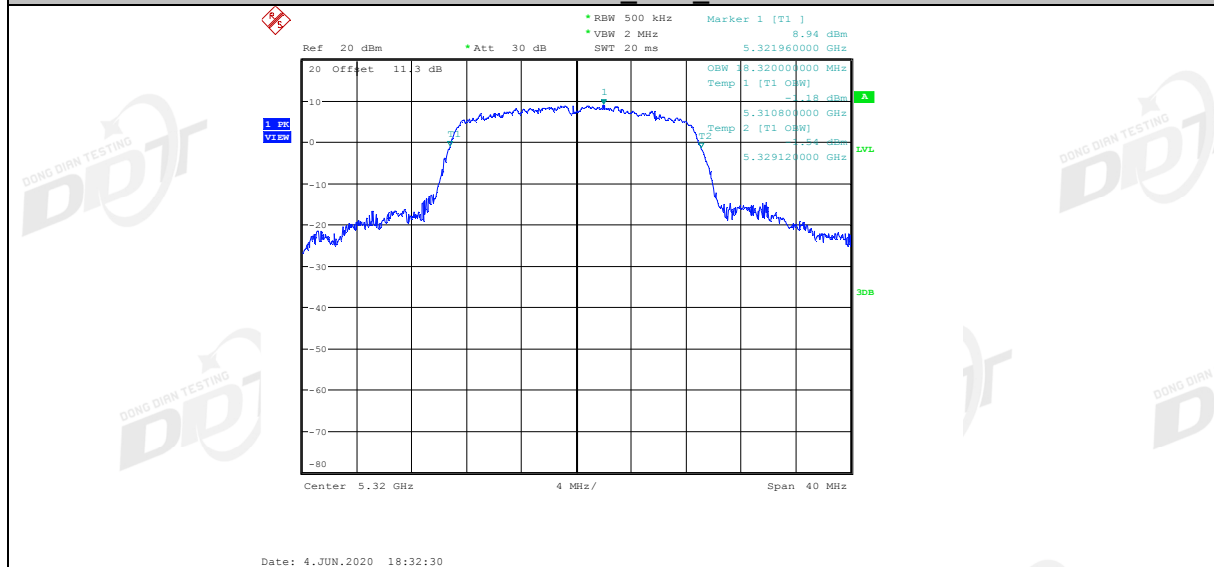
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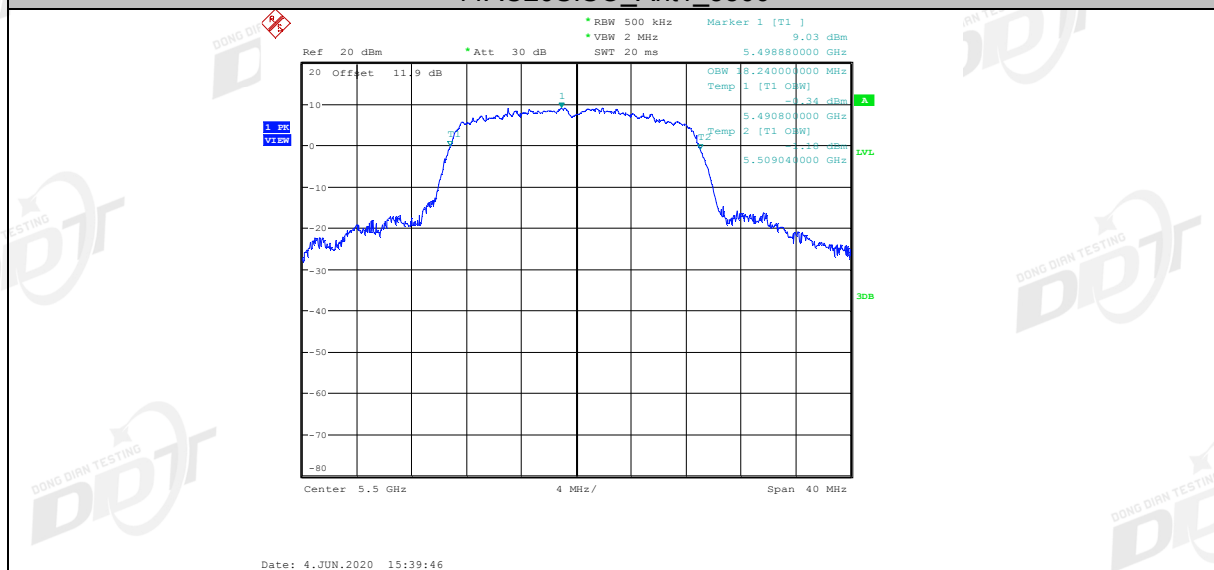
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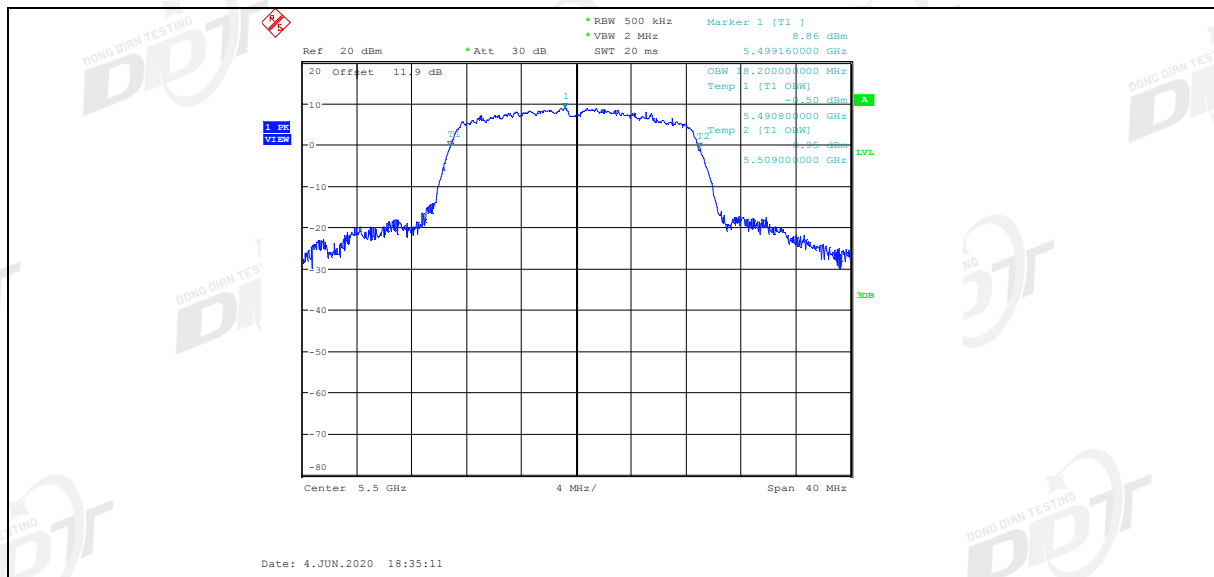
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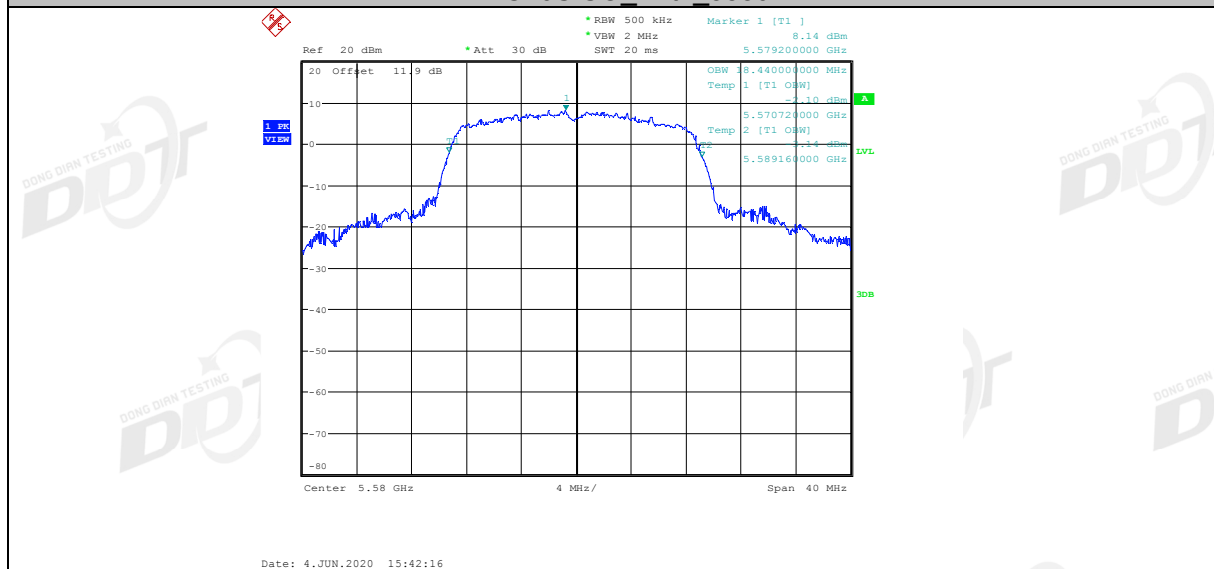
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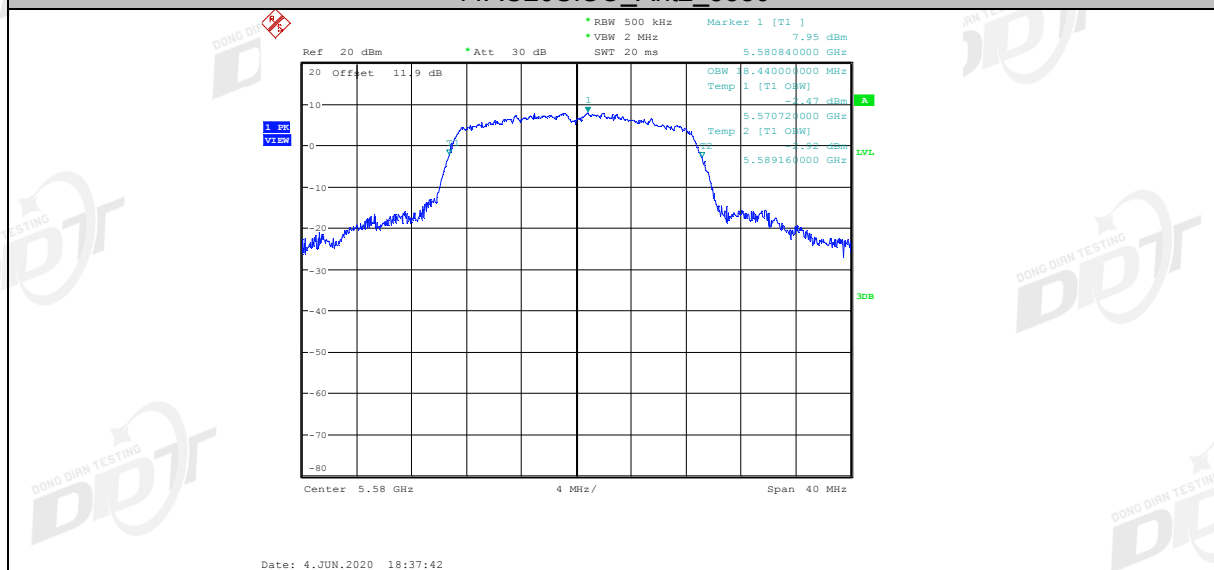
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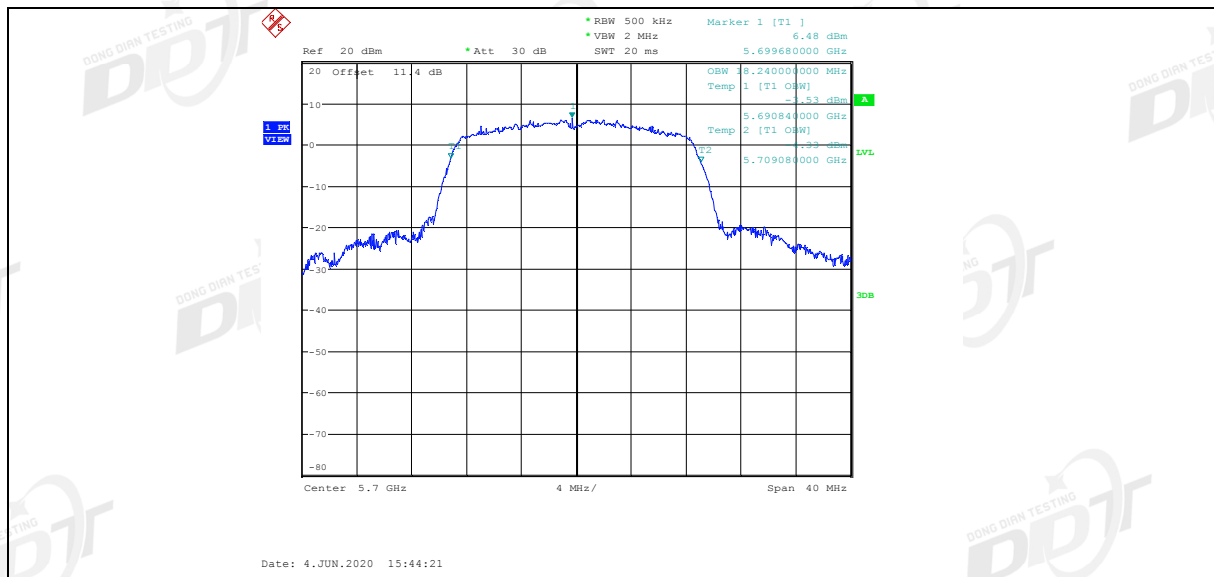
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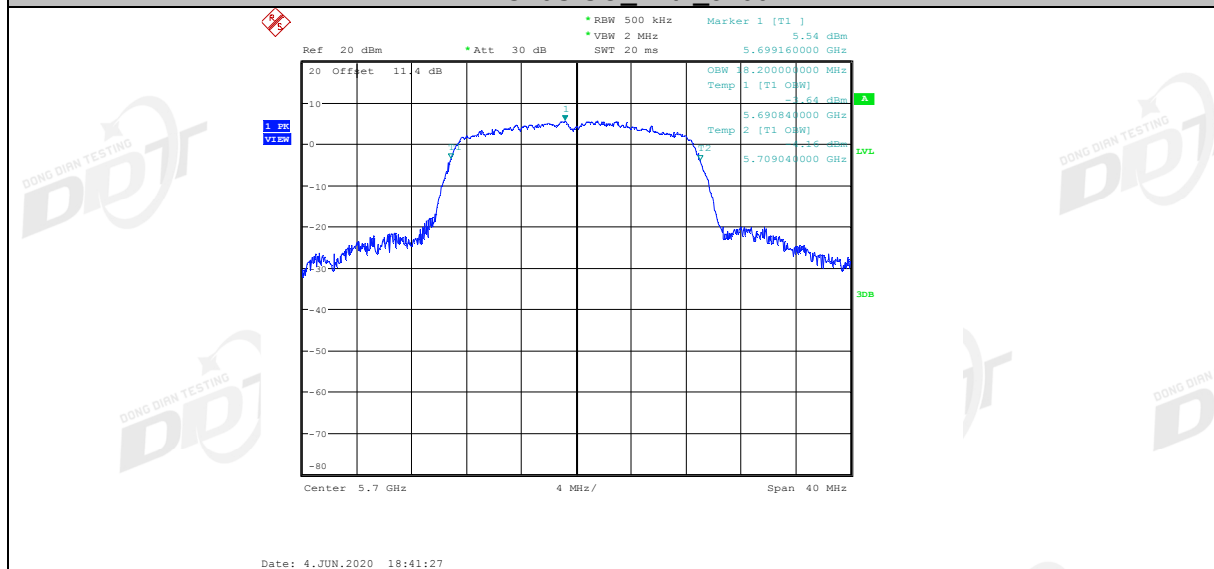
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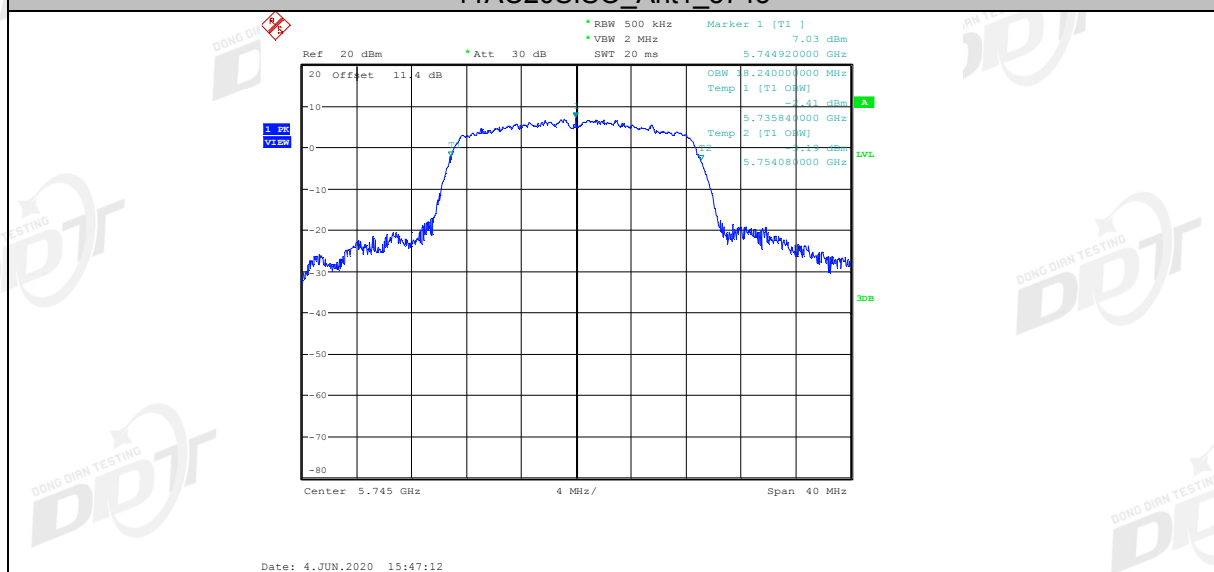
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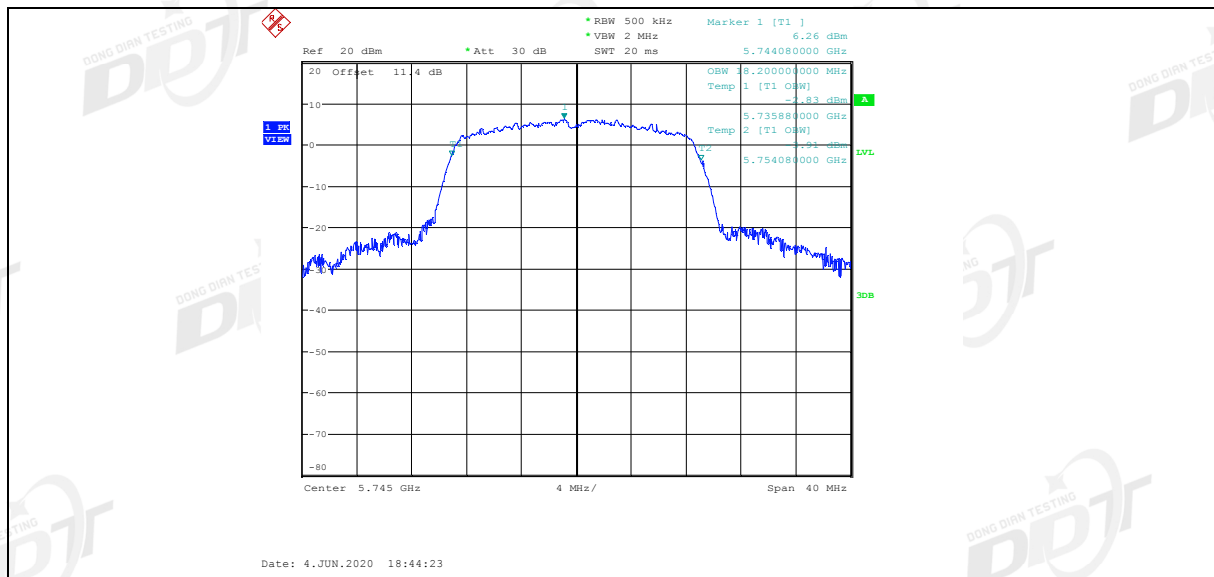
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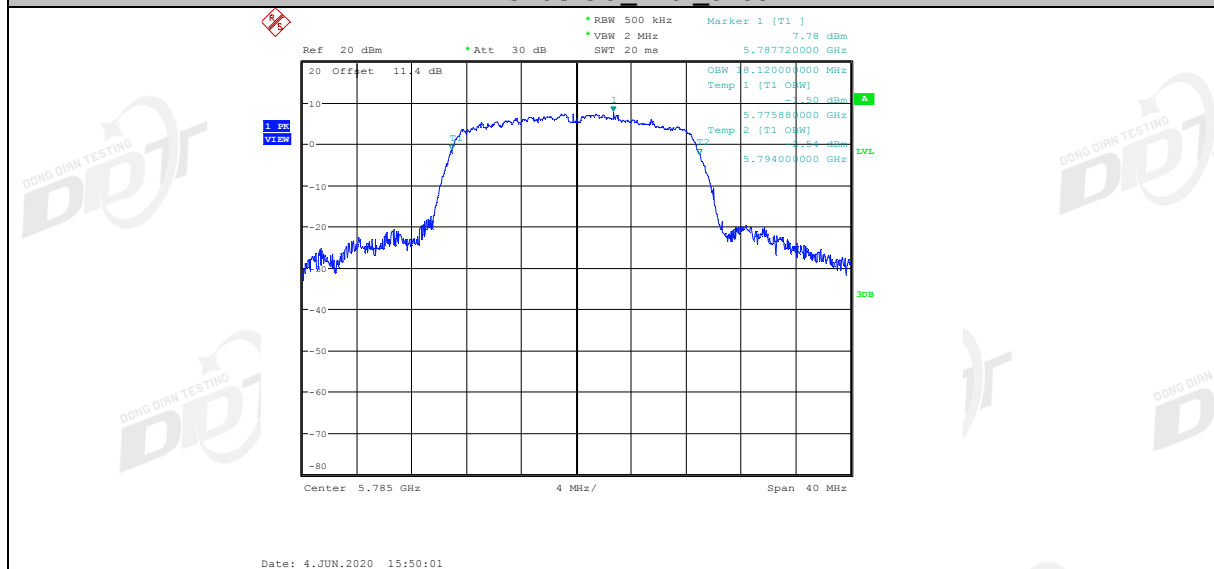
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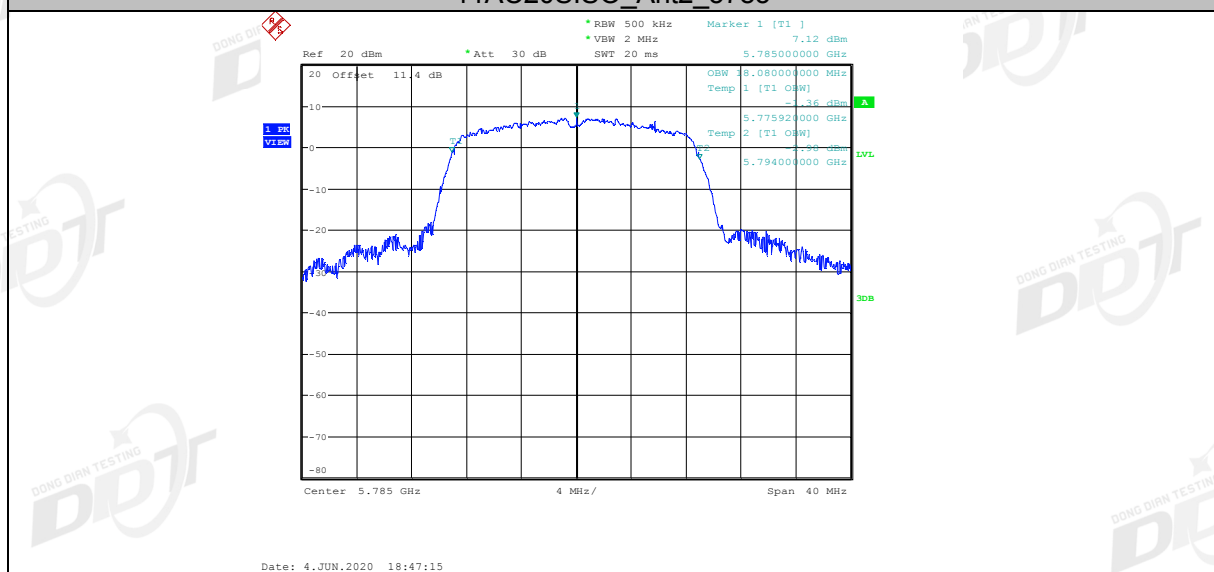
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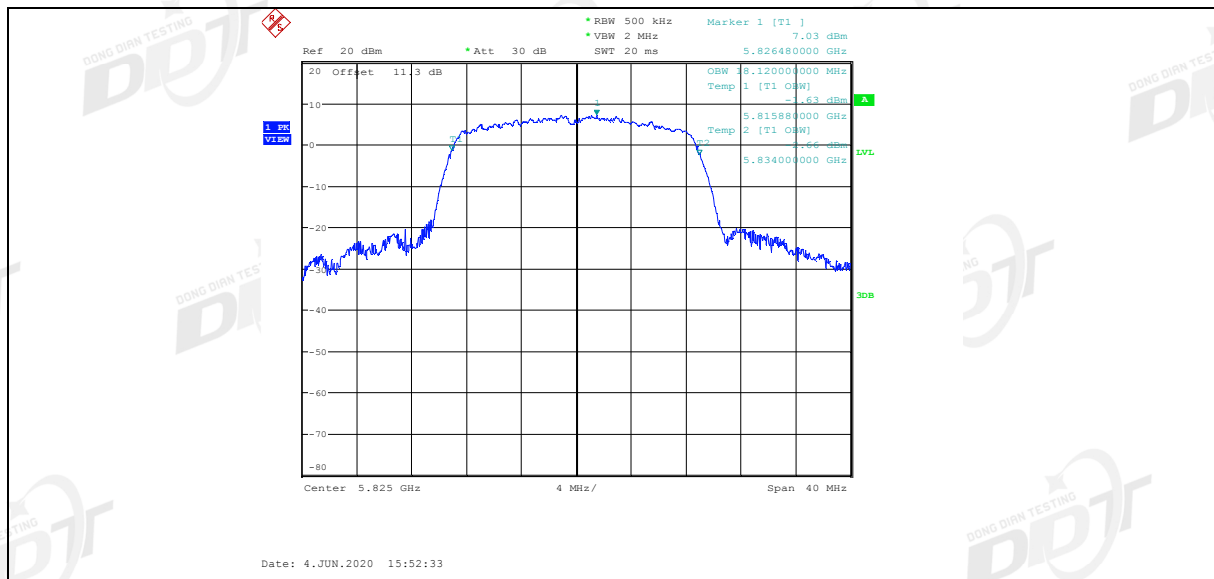
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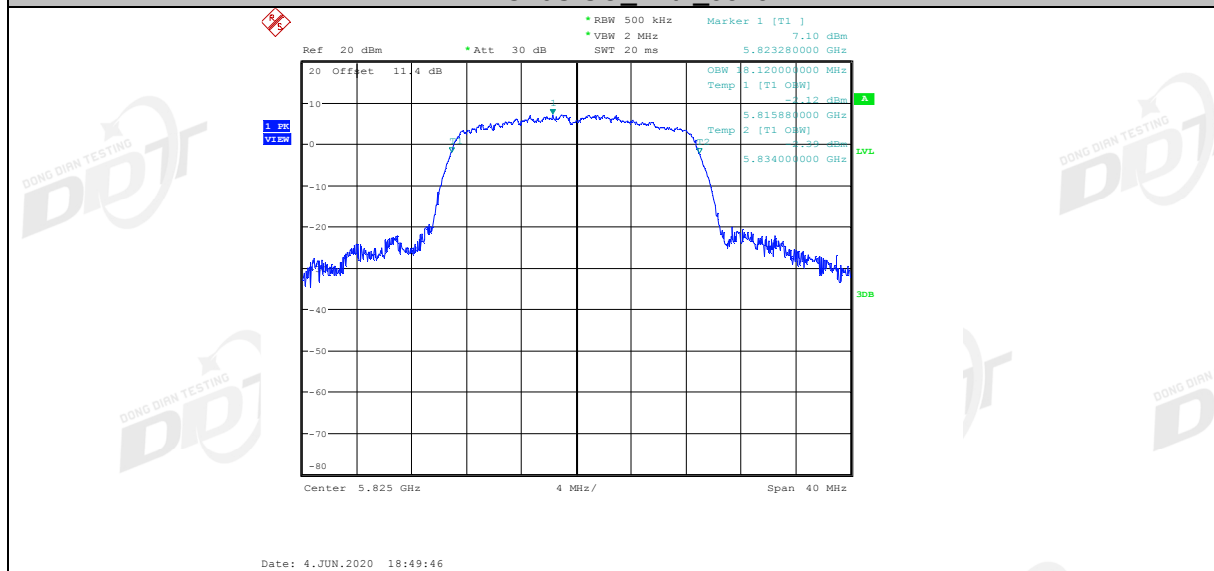
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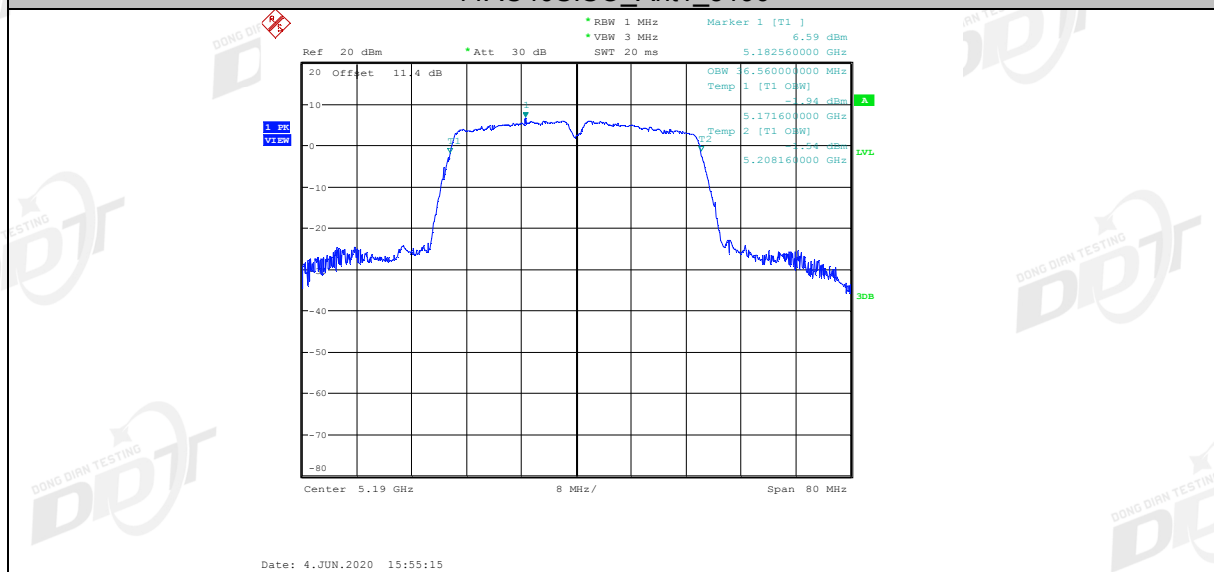
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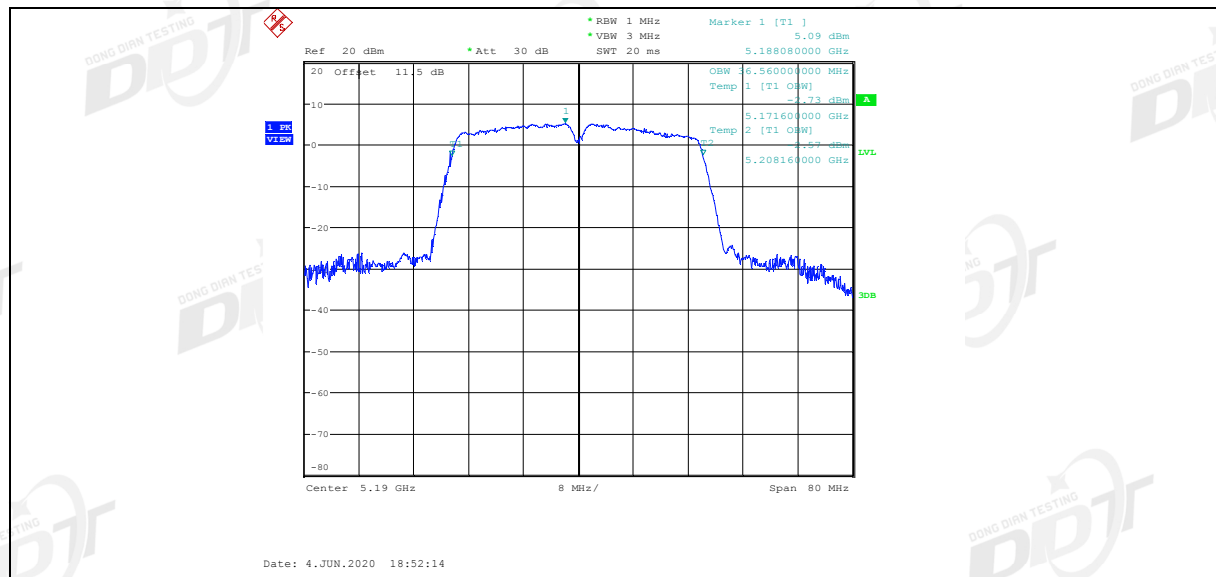
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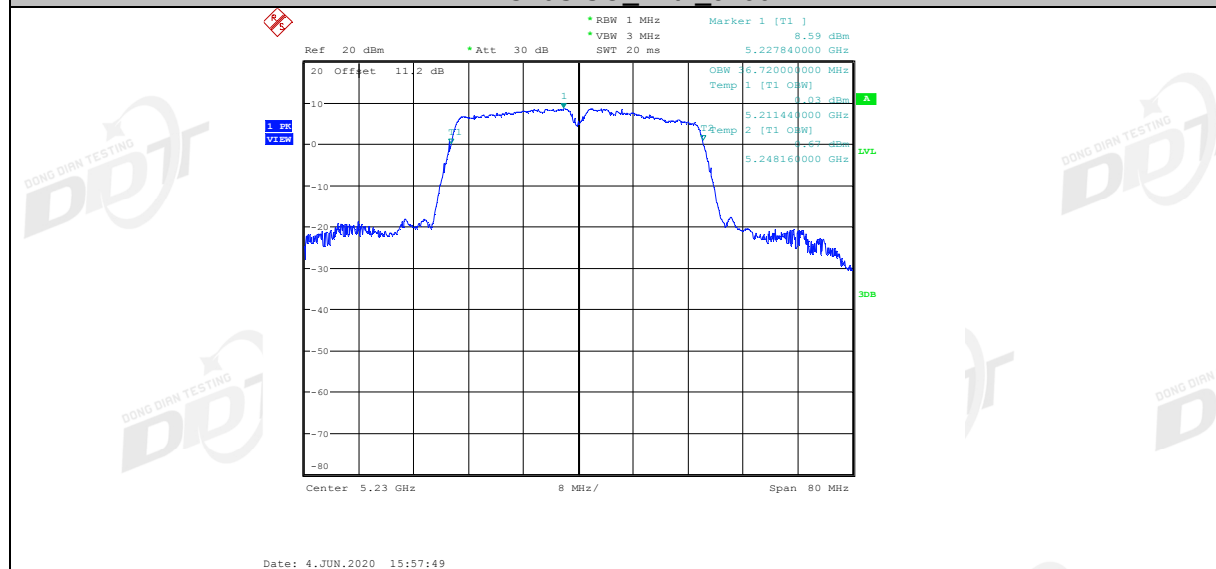
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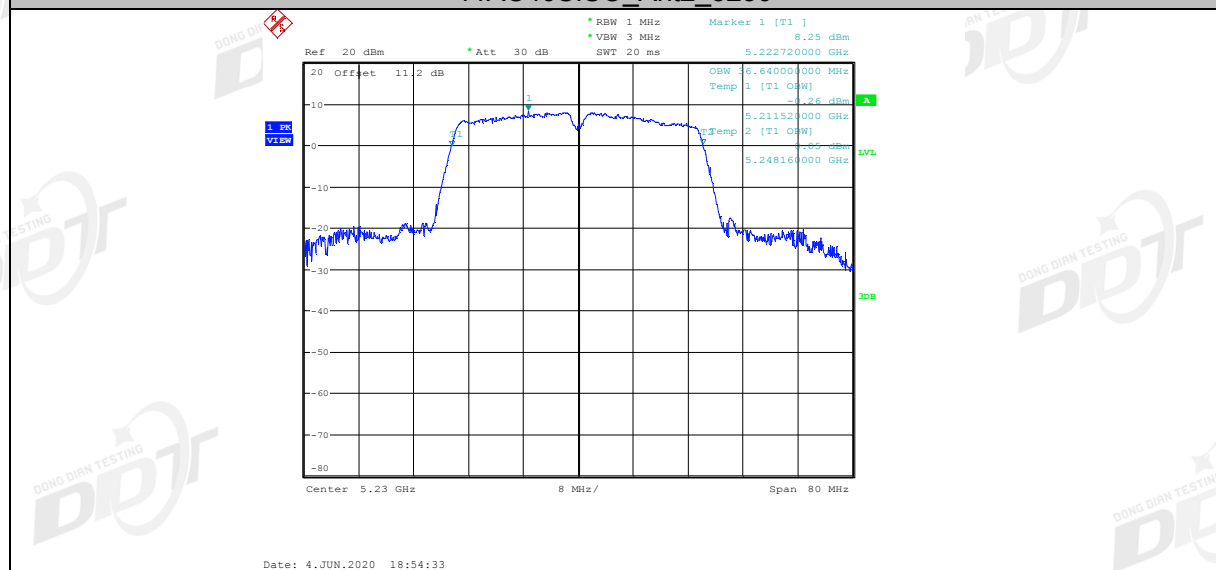
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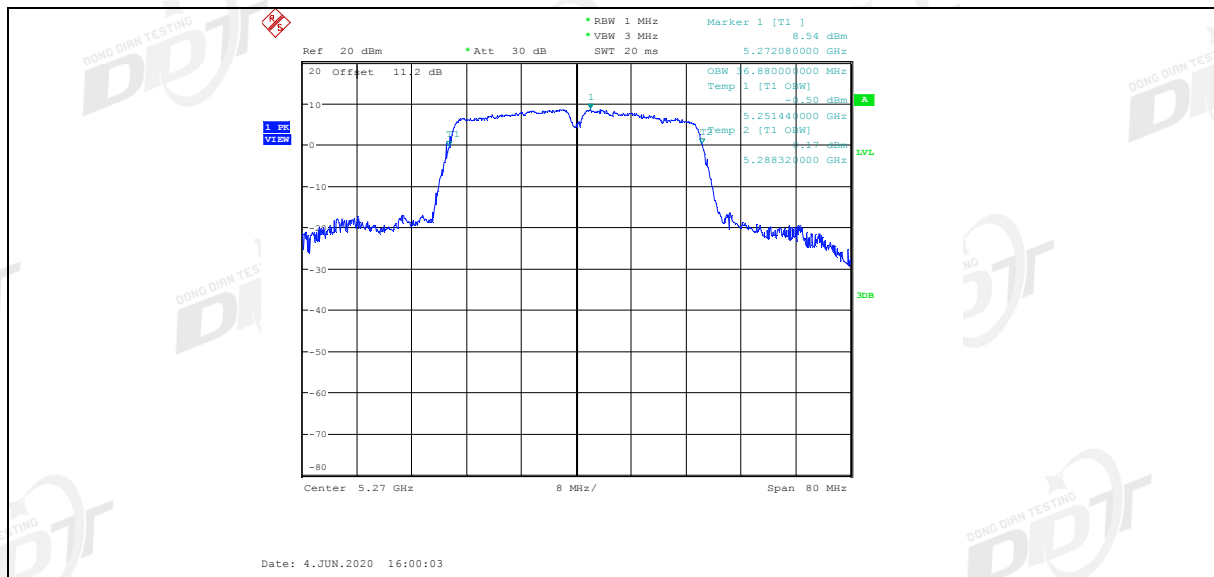
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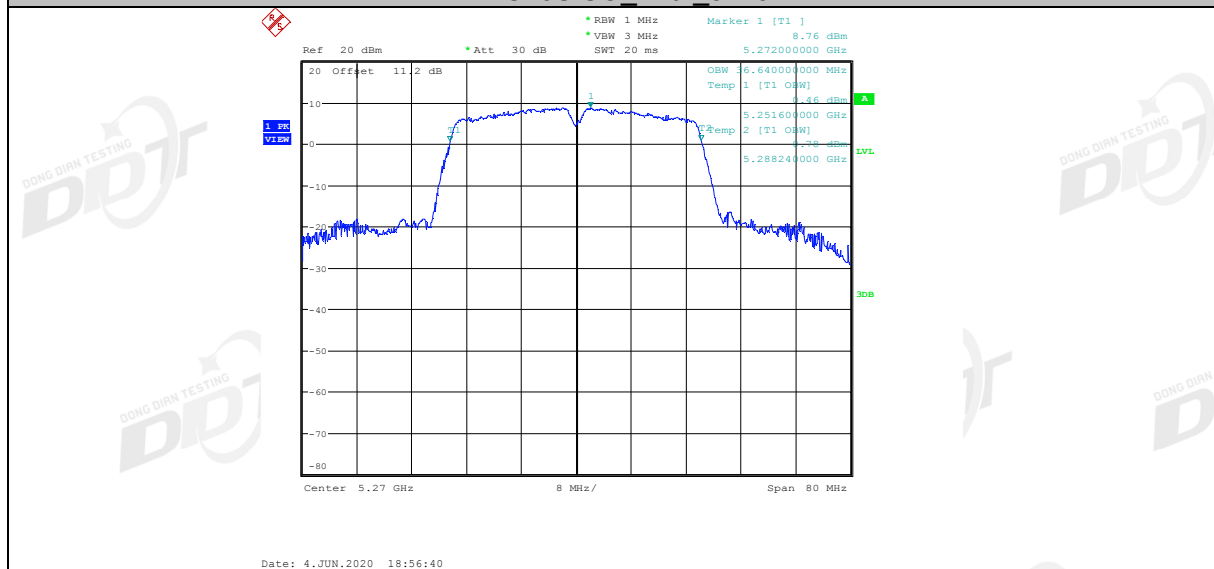
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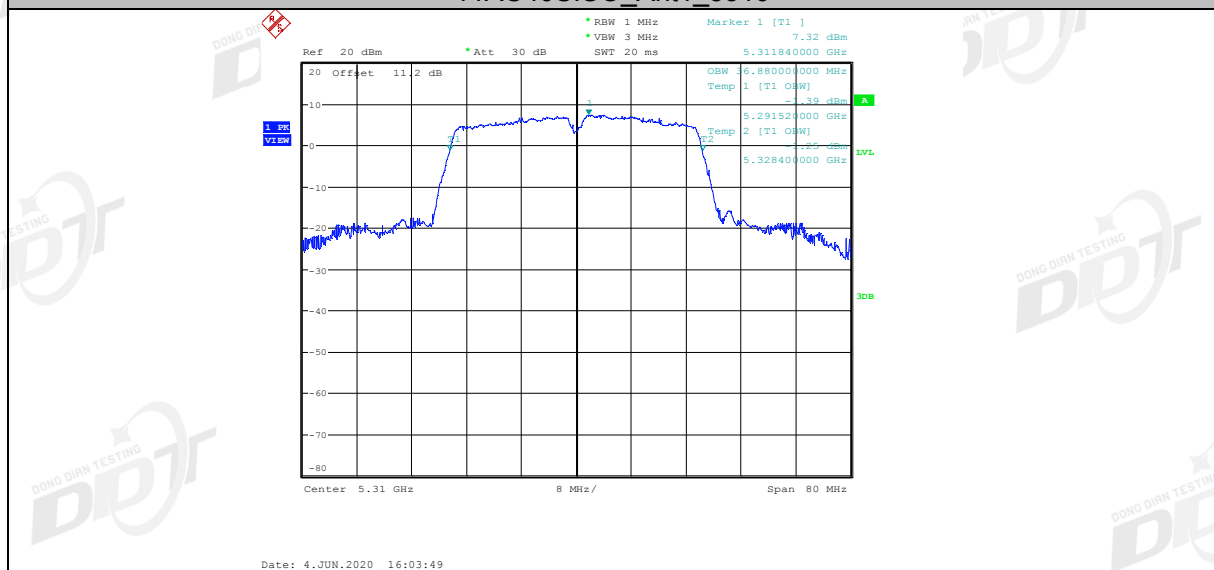
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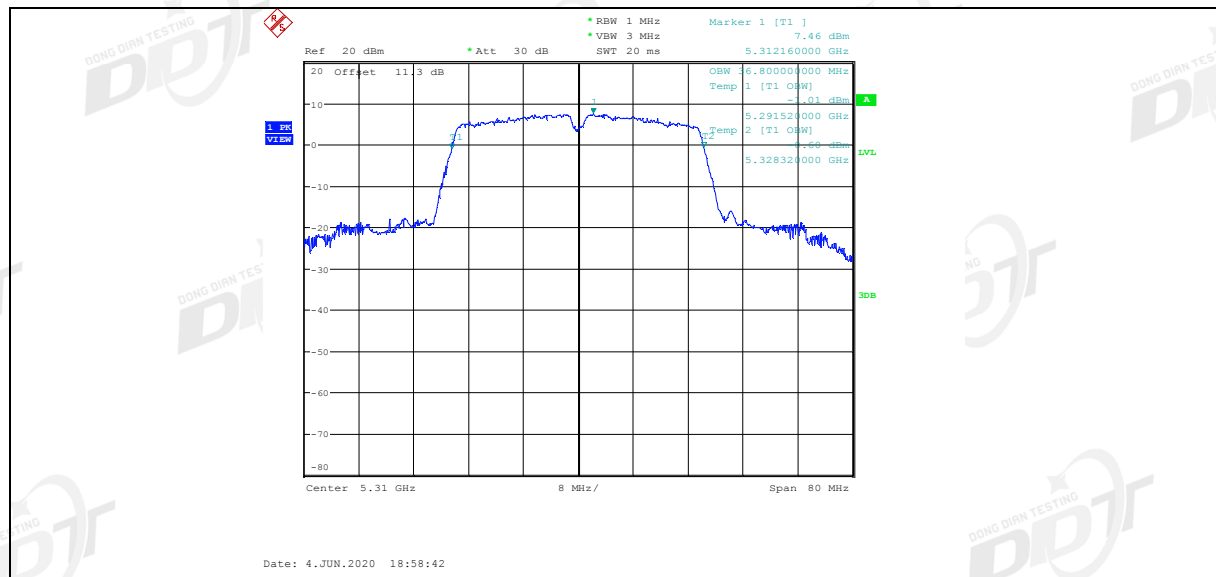
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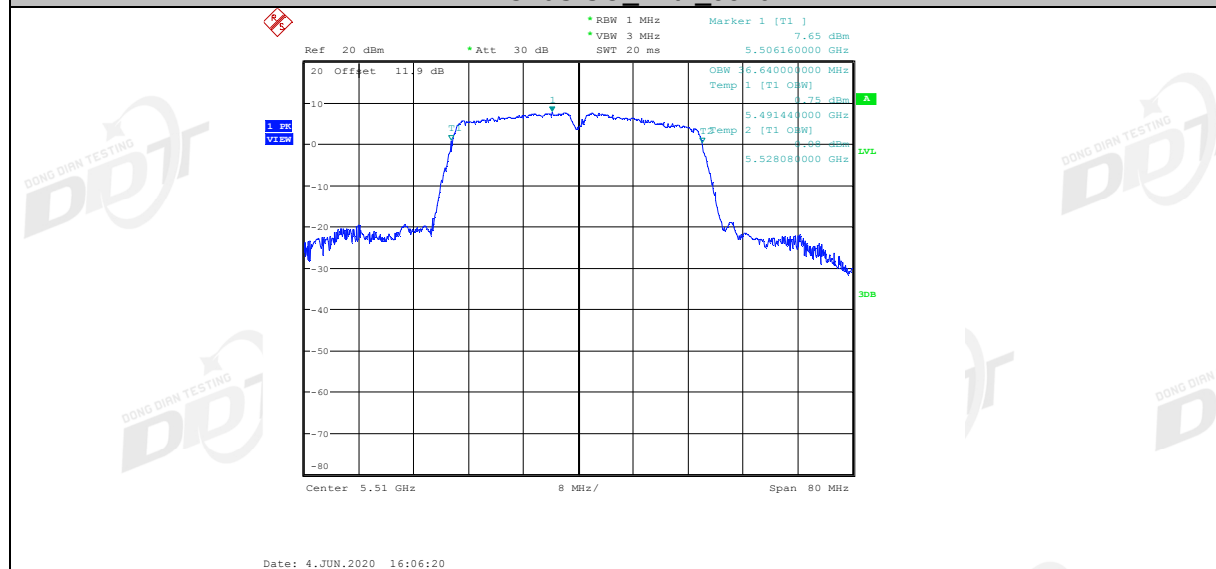
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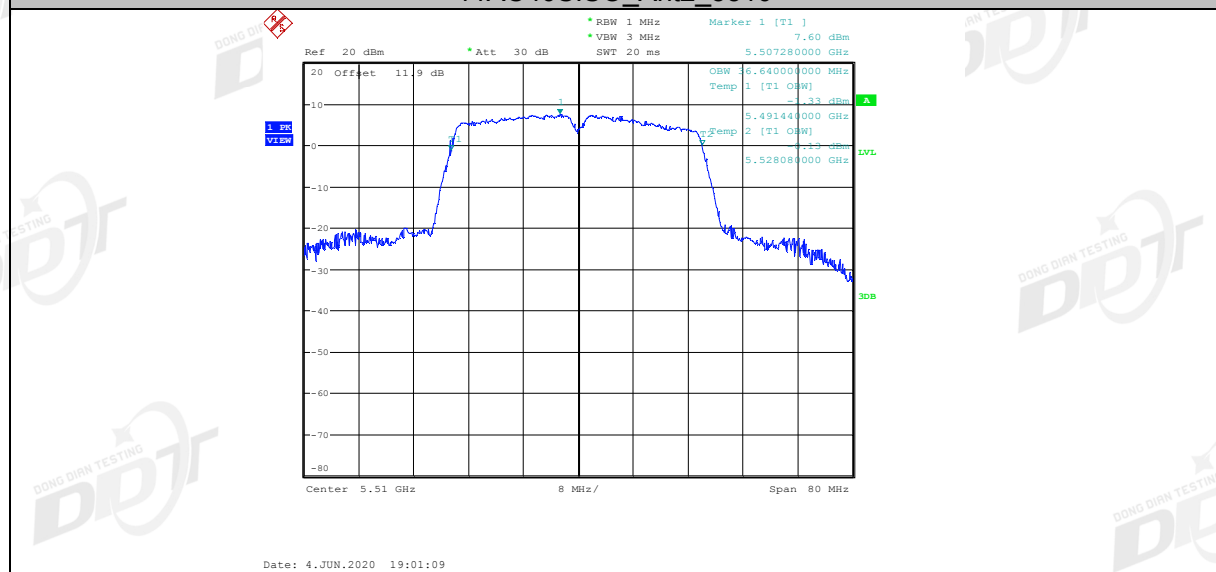
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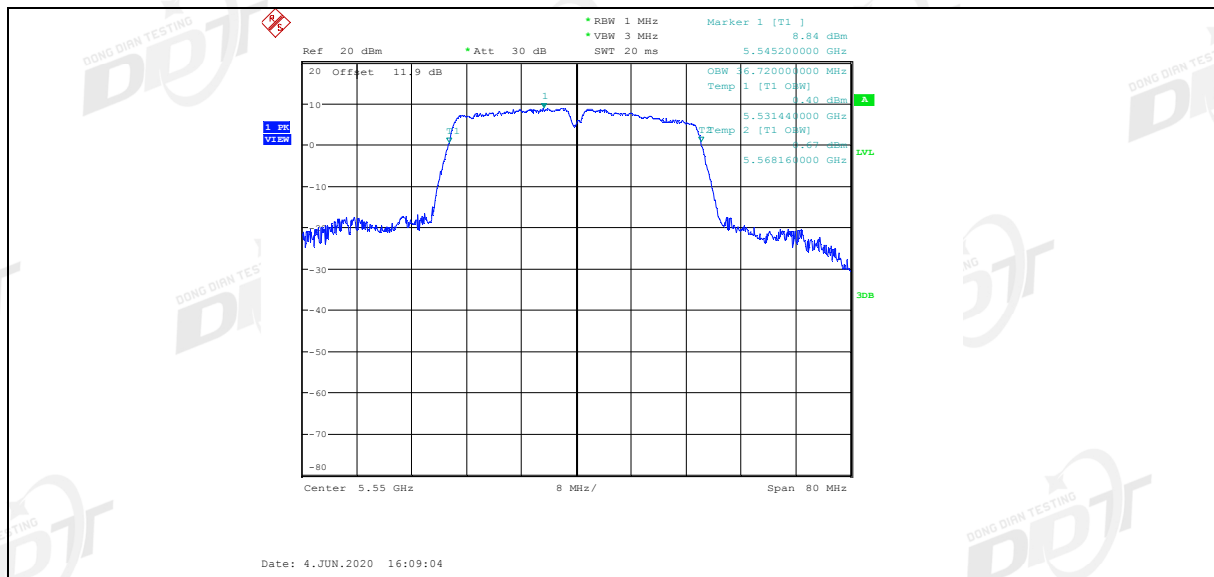
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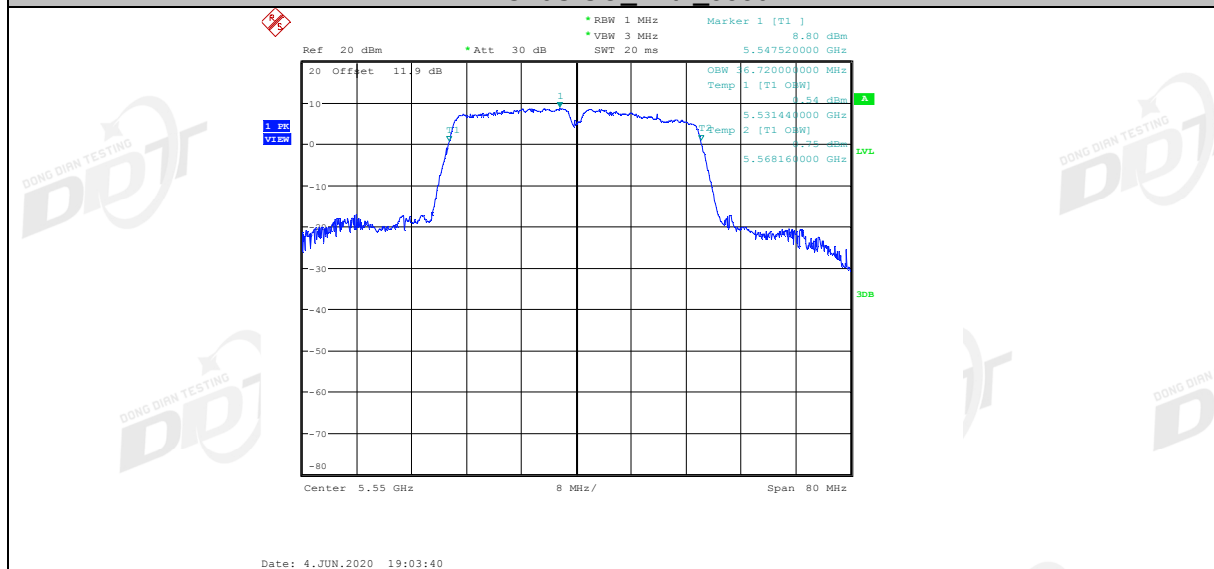
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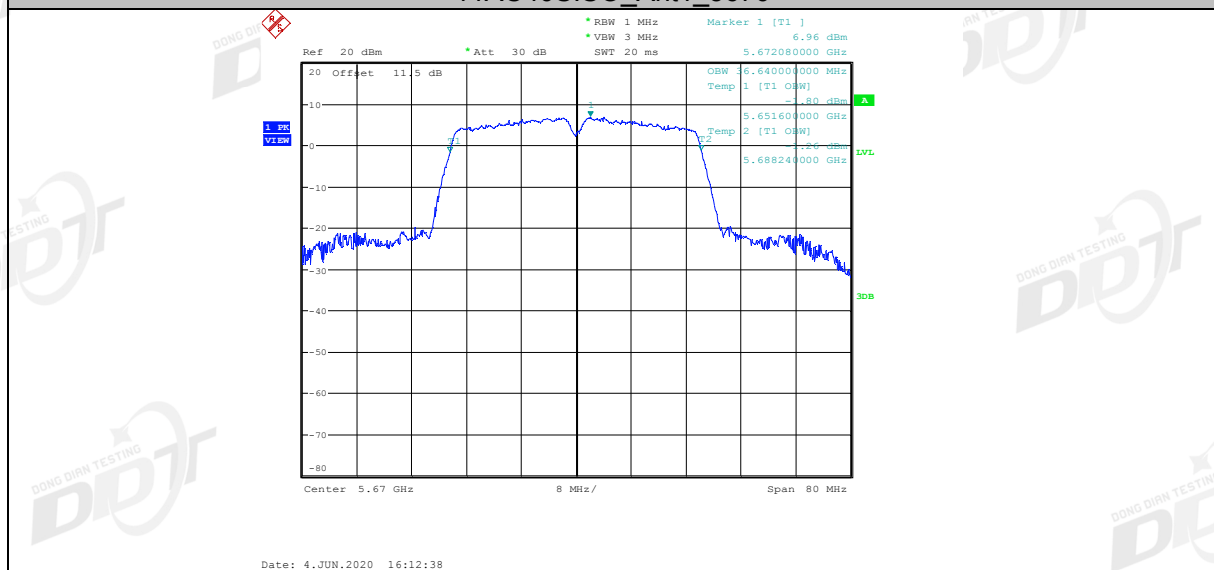
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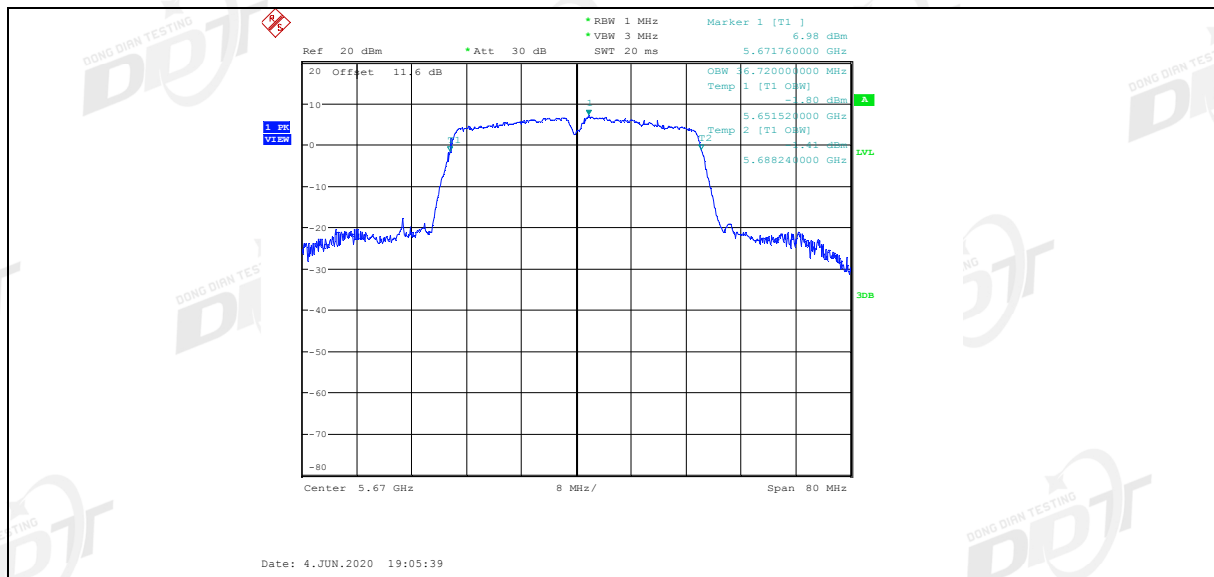
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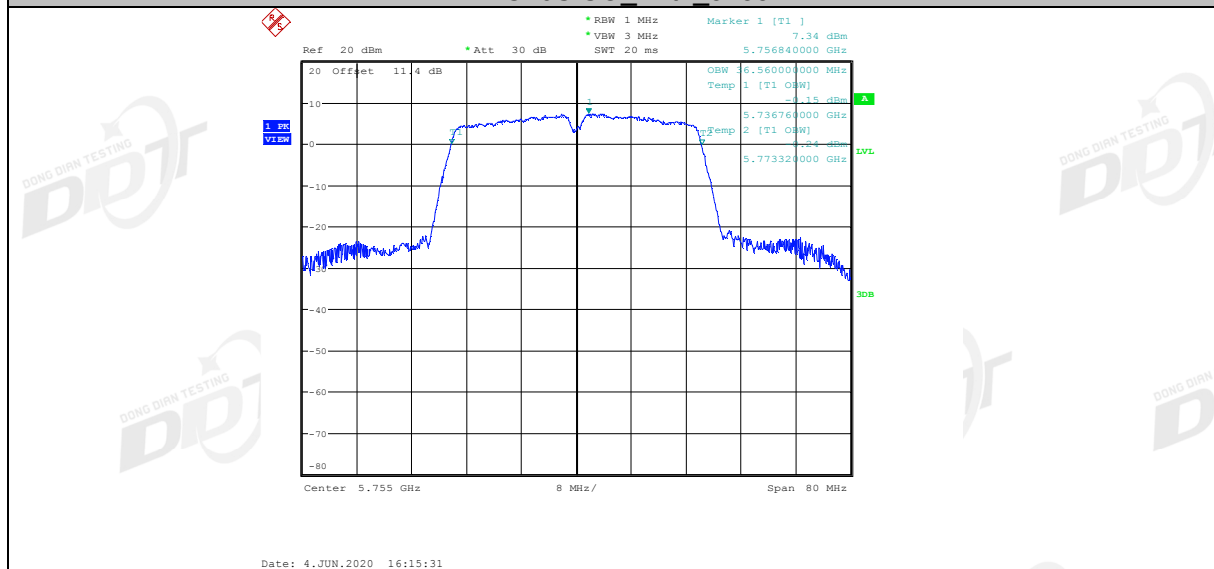
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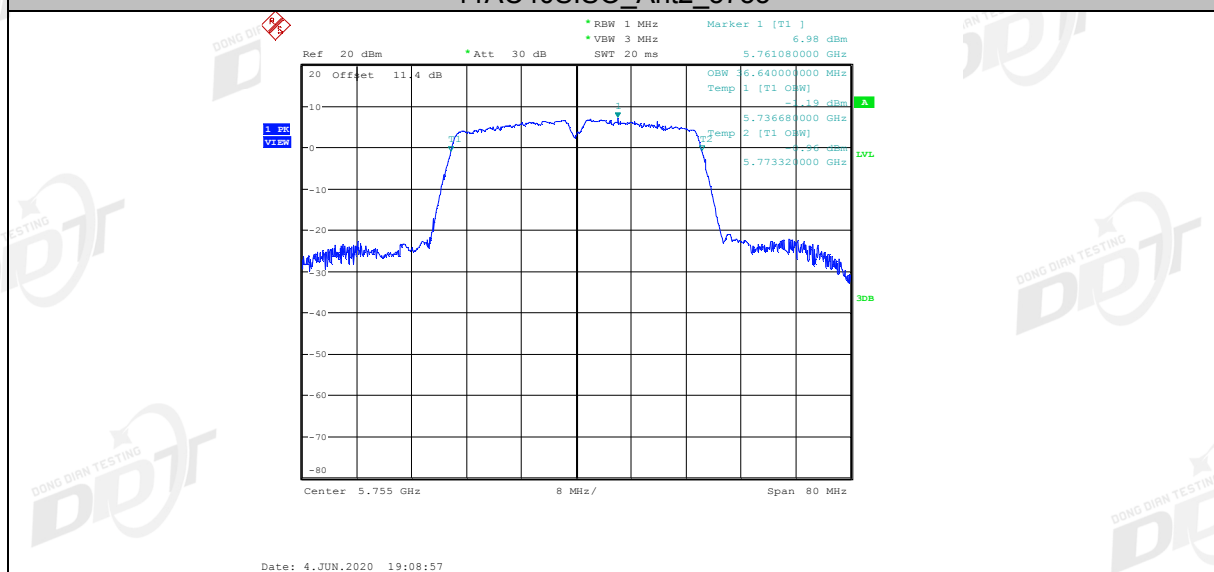
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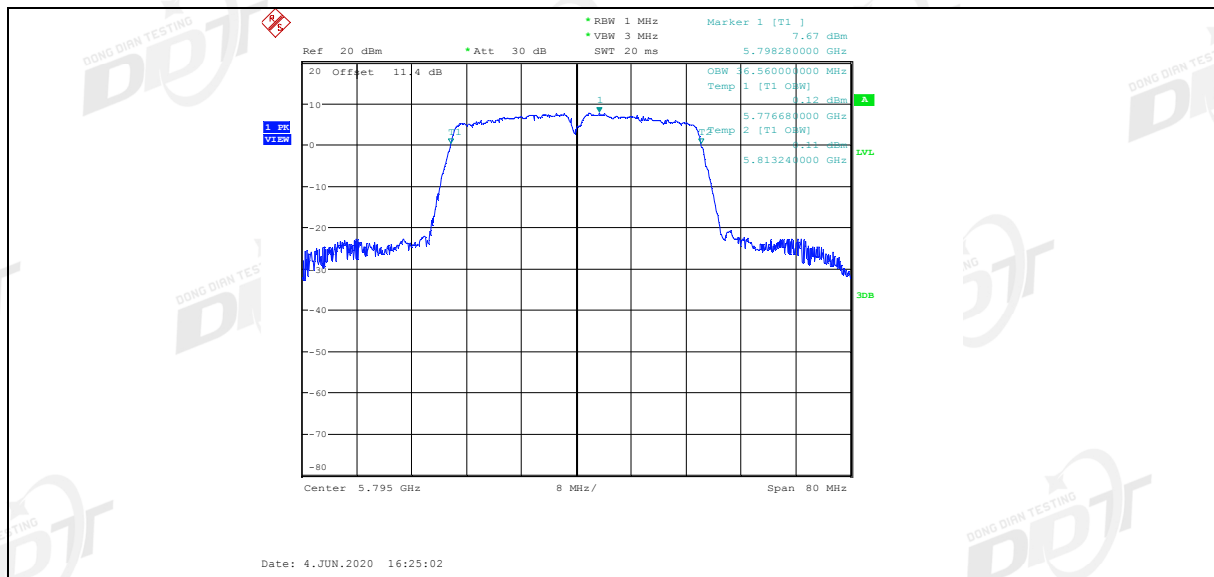
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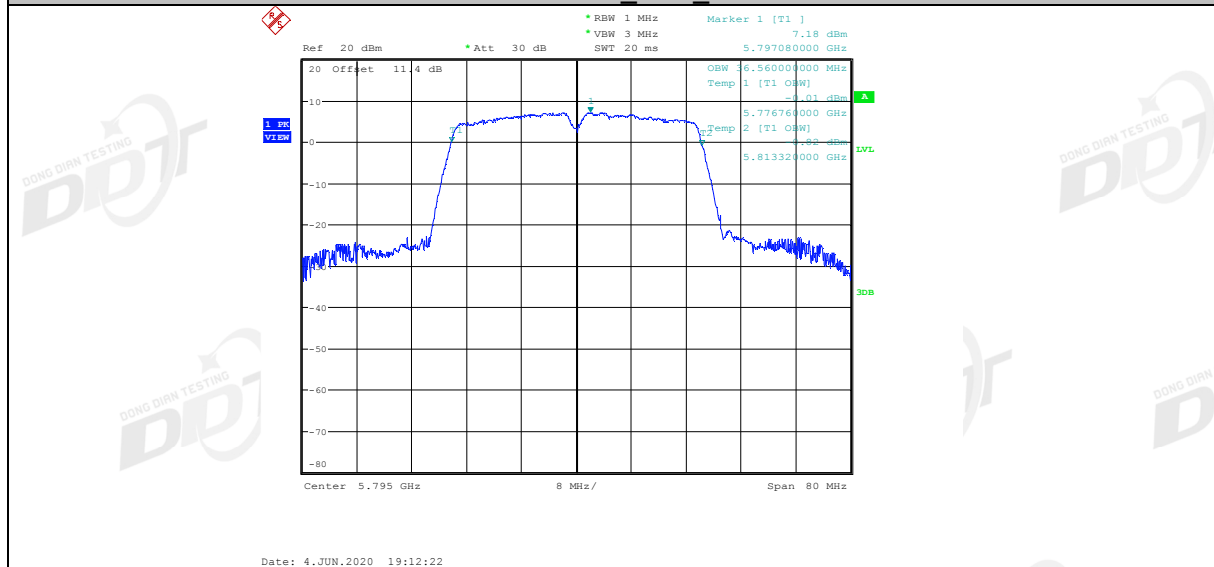
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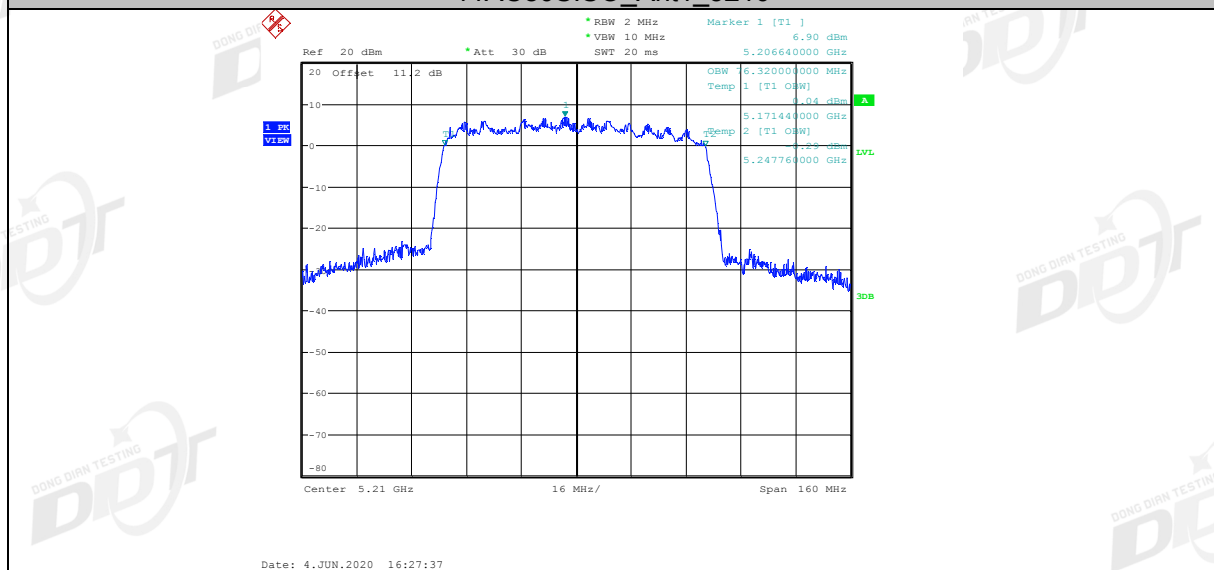
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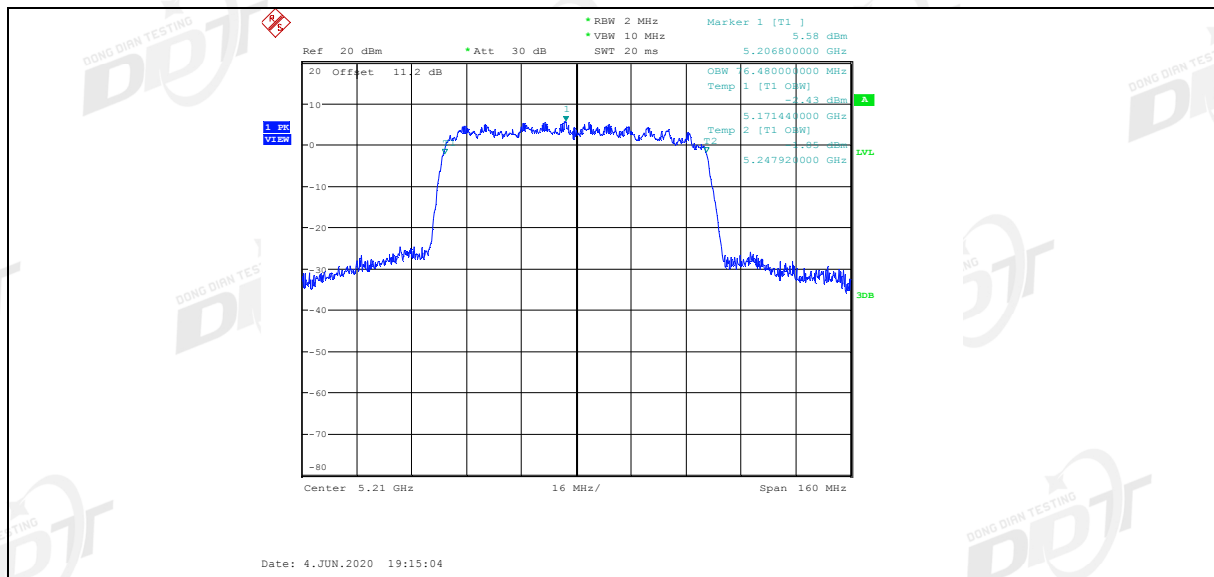
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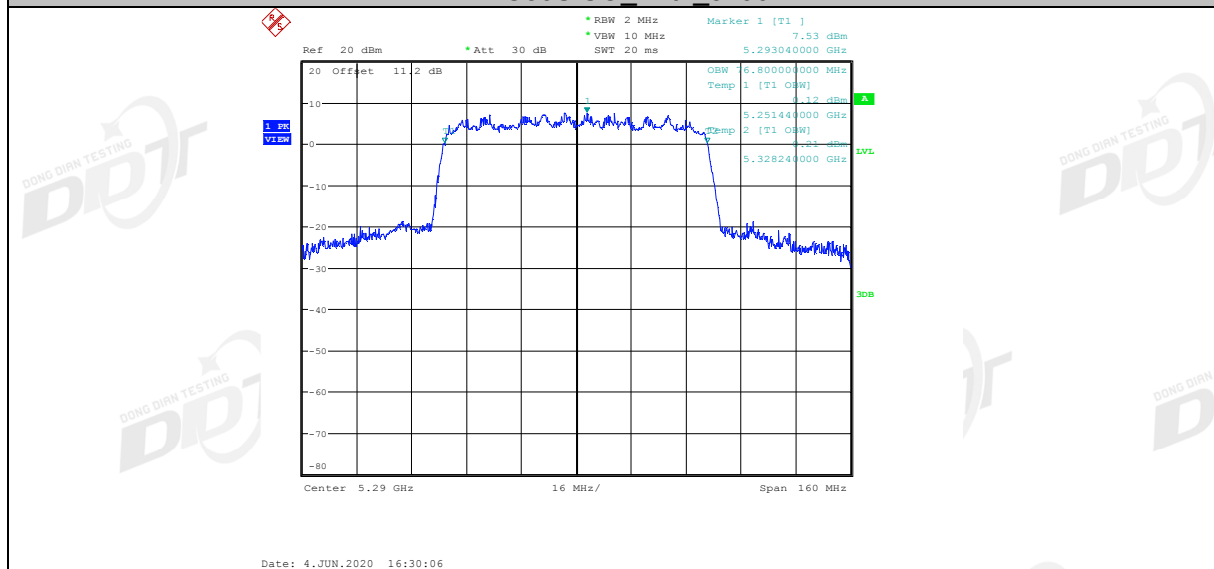
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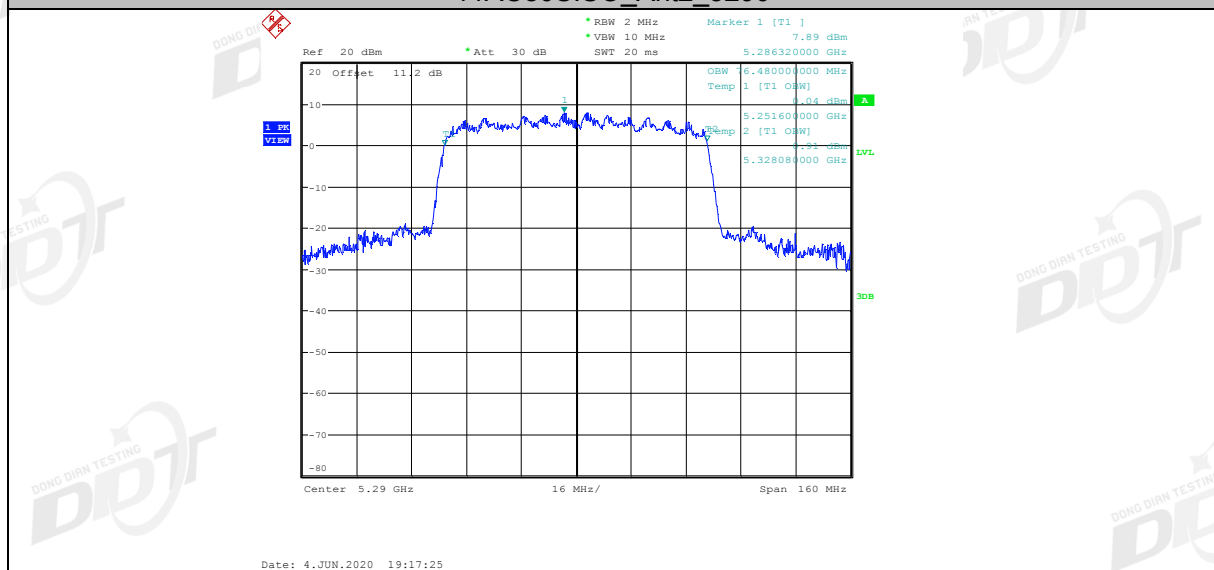
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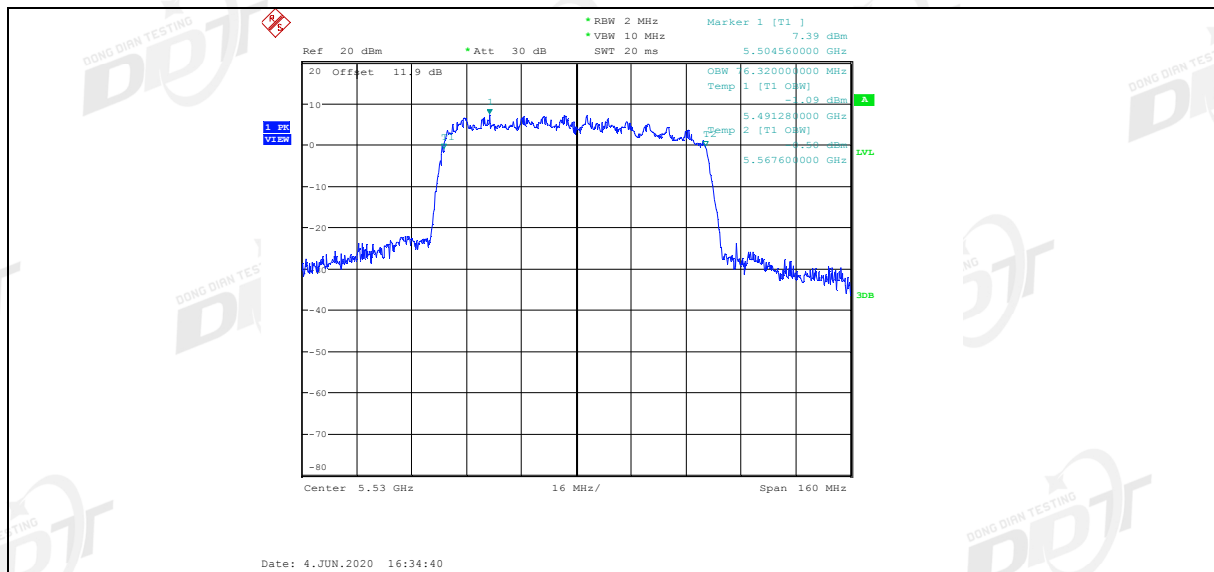
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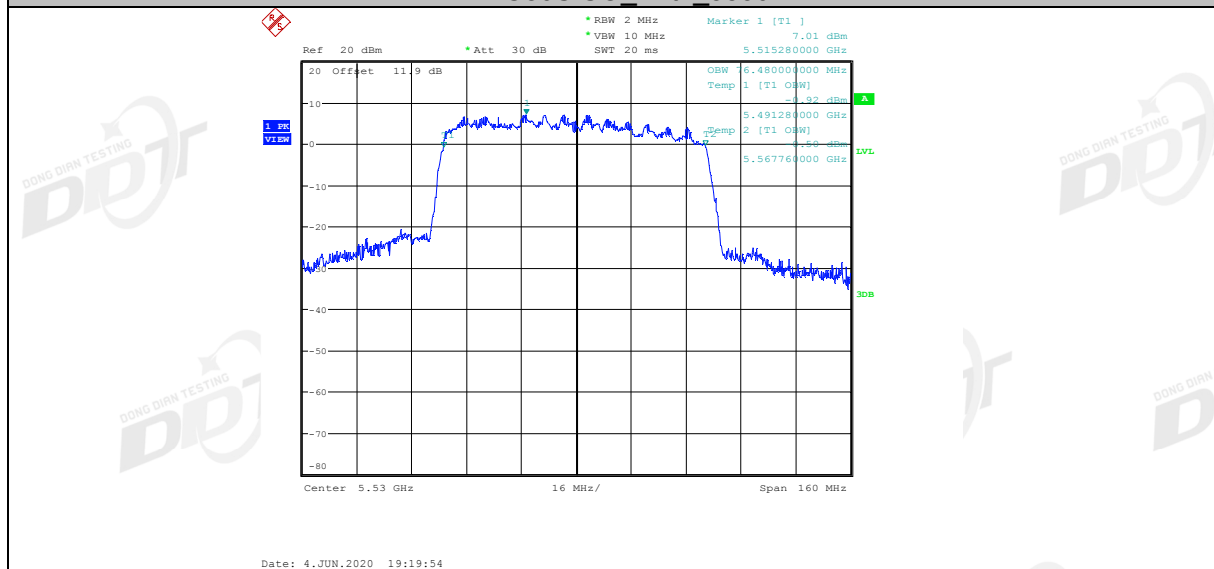
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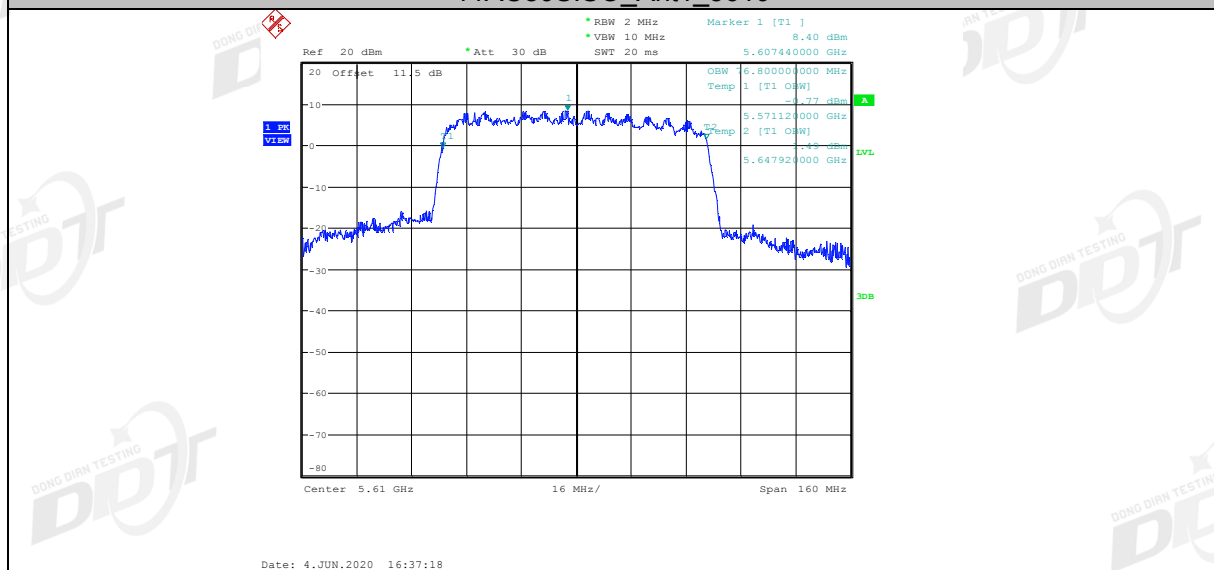
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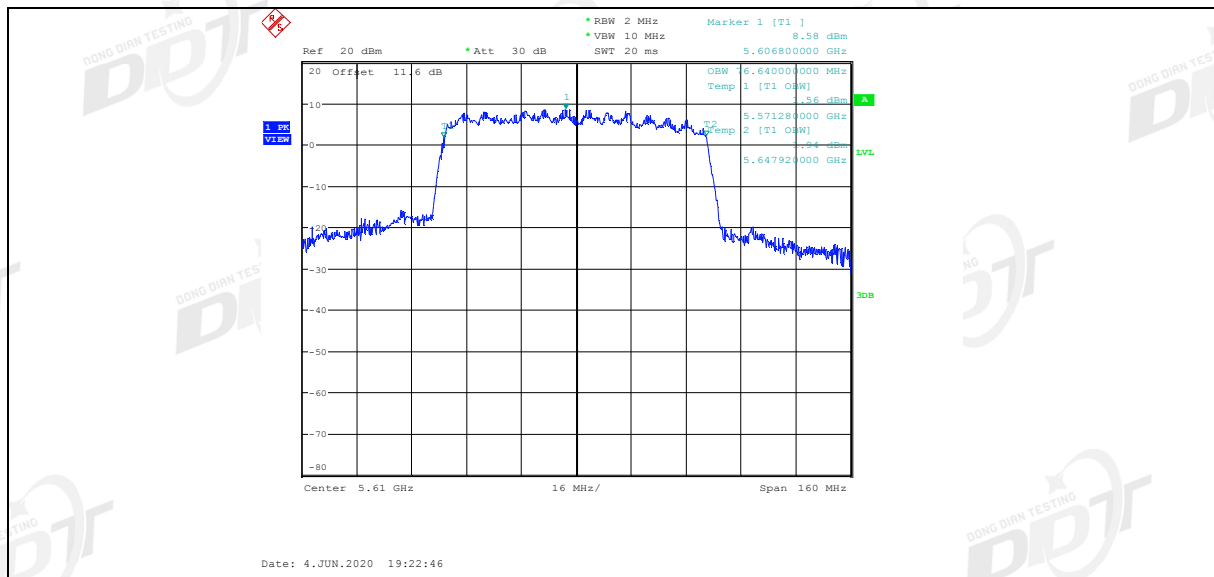
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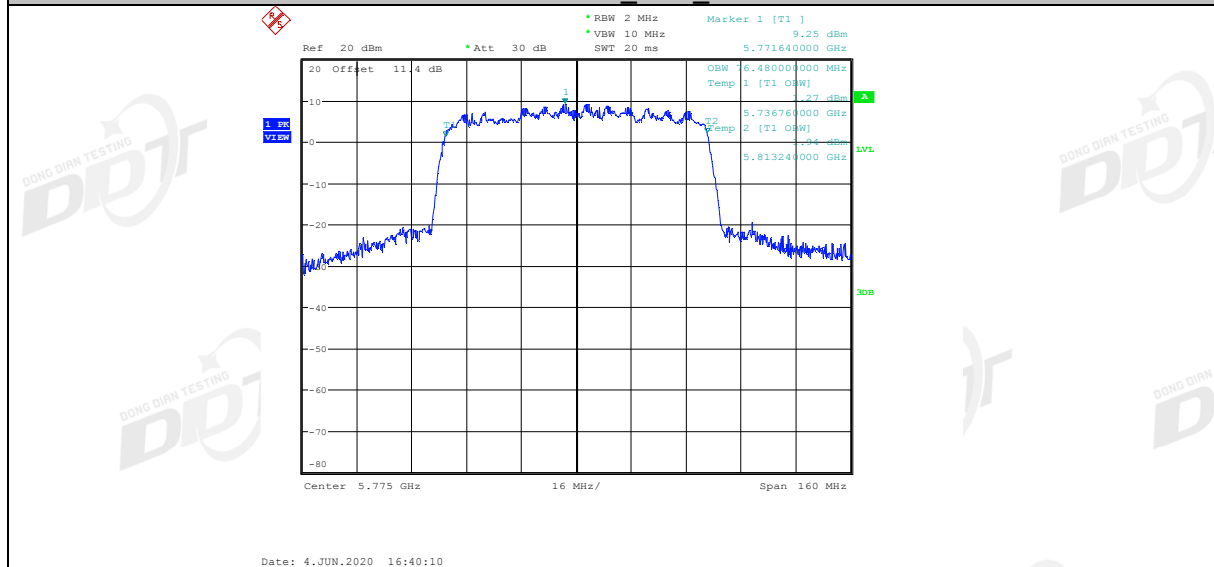
11AC80SISO_Ant1_5610



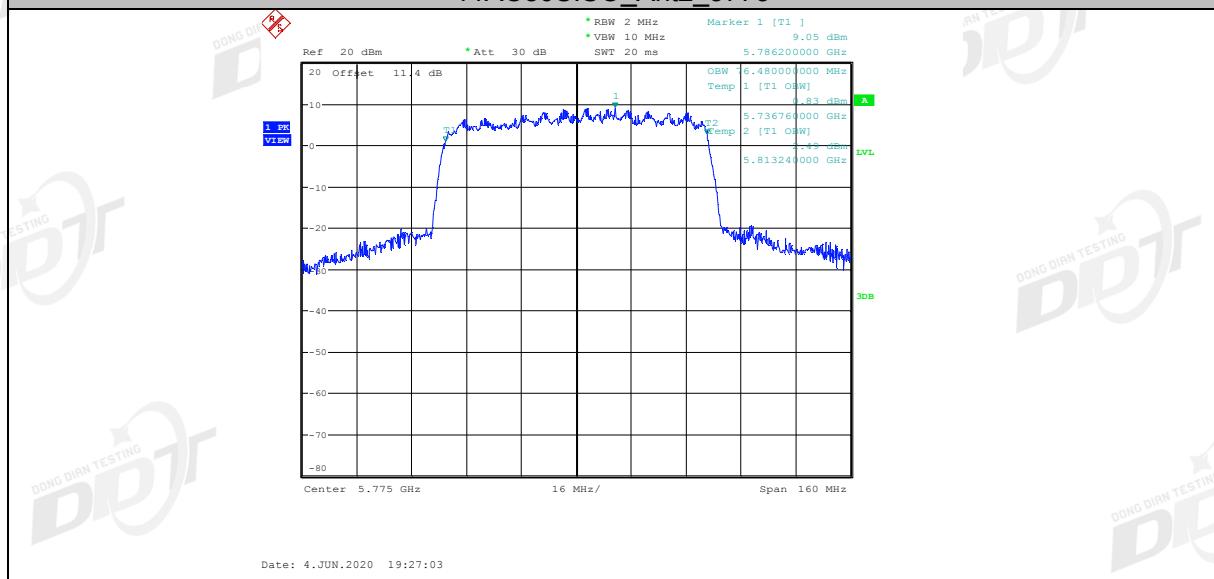
11AC80SISO_Ant2_5610



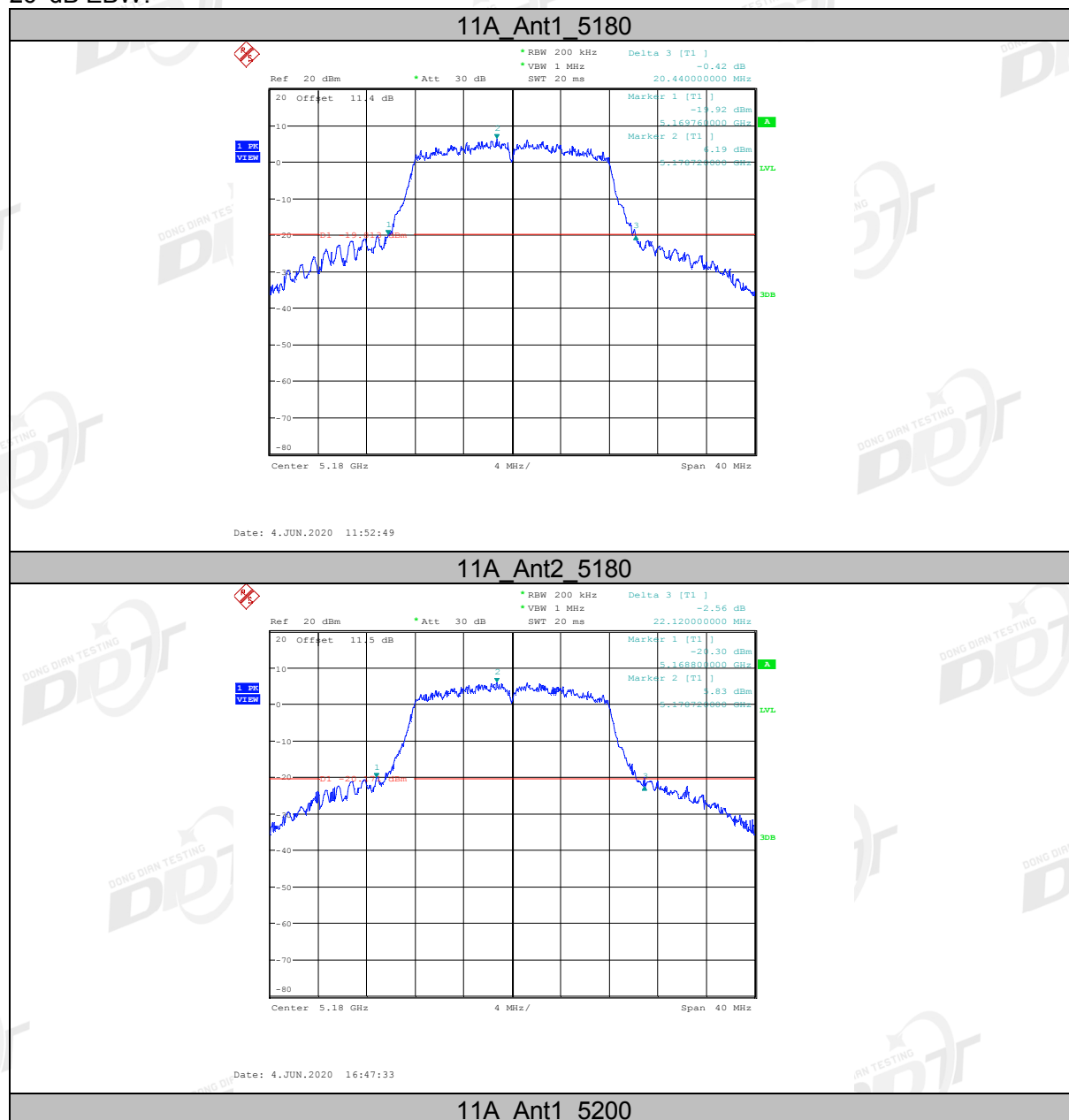
11AC80SISO_Ant1_5775

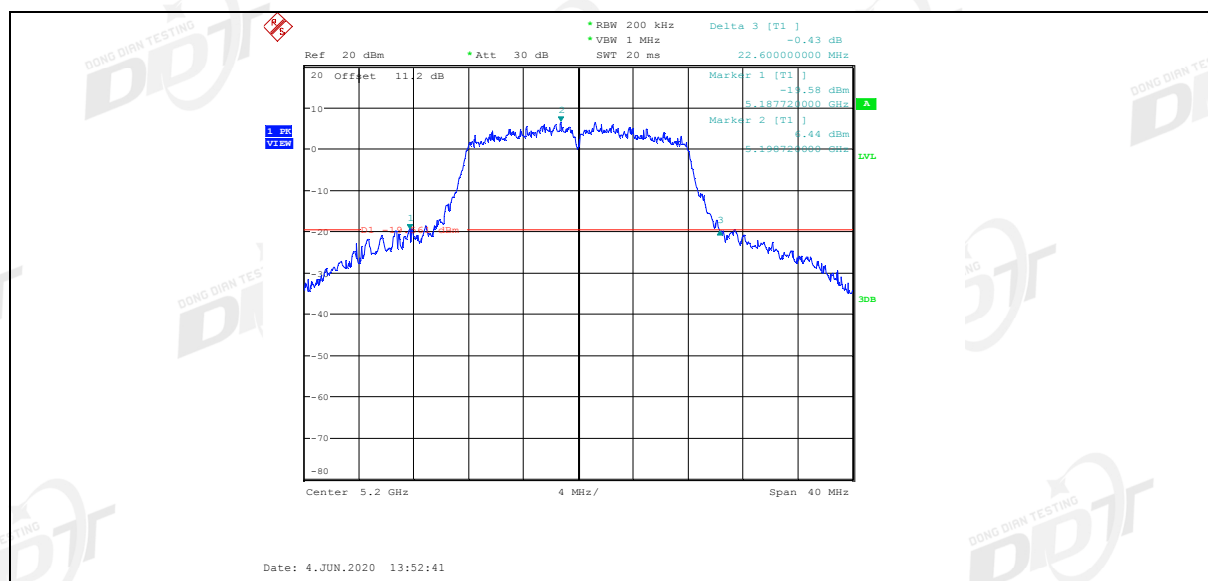


11AC80SISO_Ant2_5775

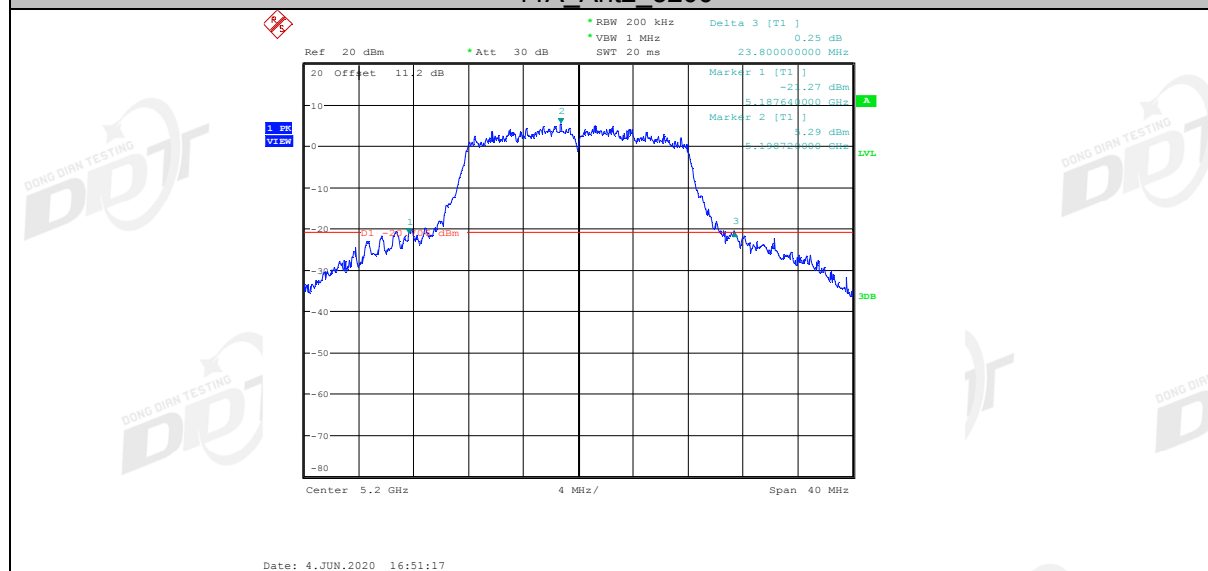


26 dB EBW:

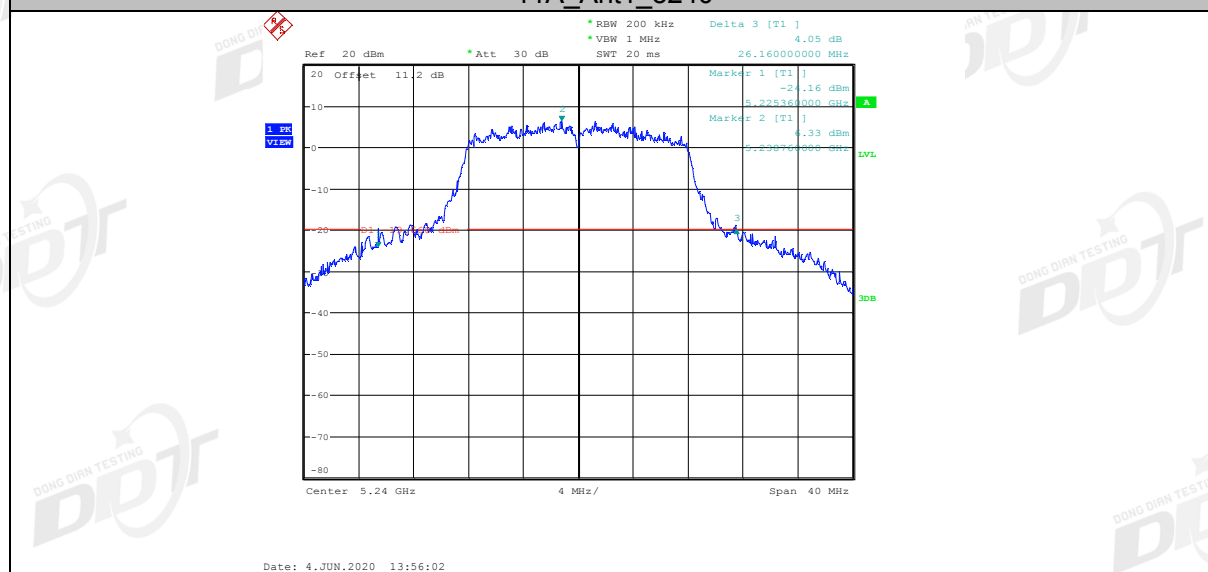




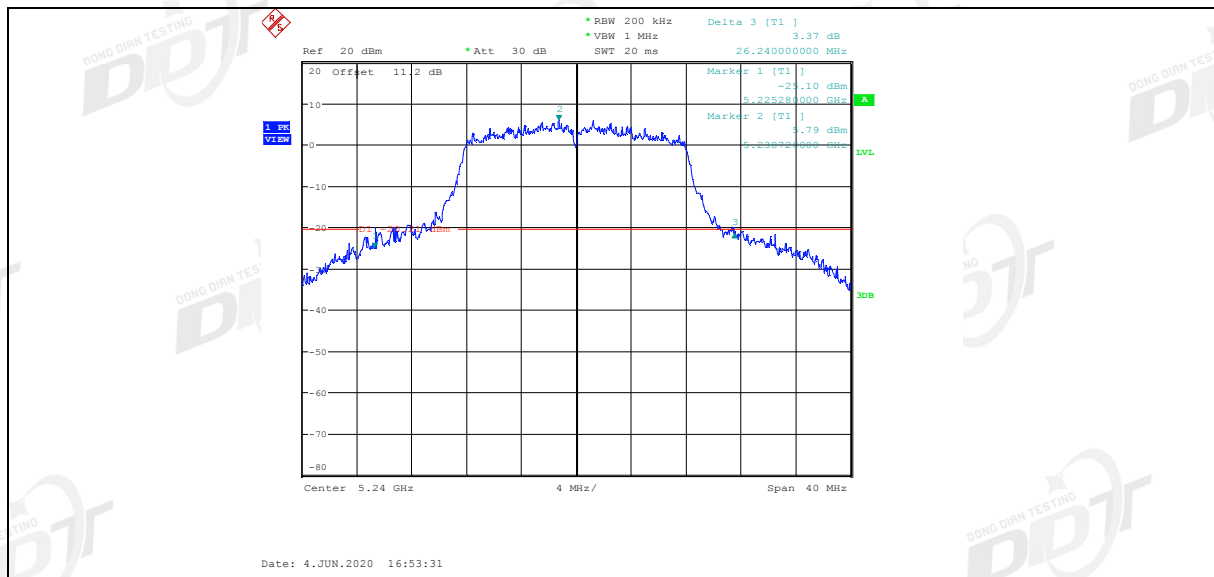
11A_Ant2_5200



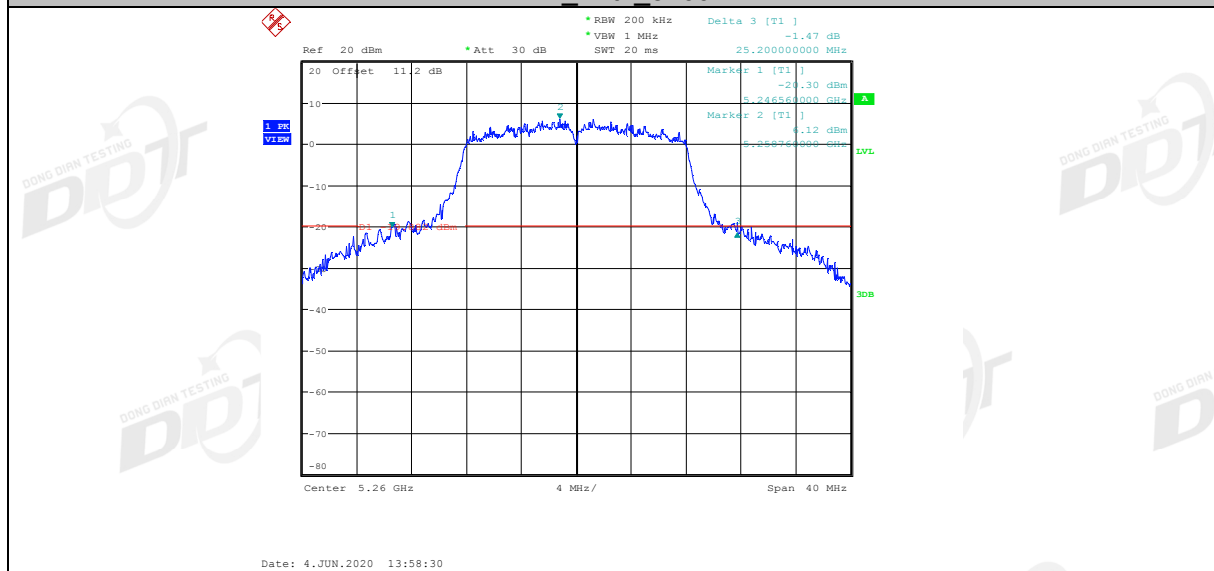
11A_Ant1_5240



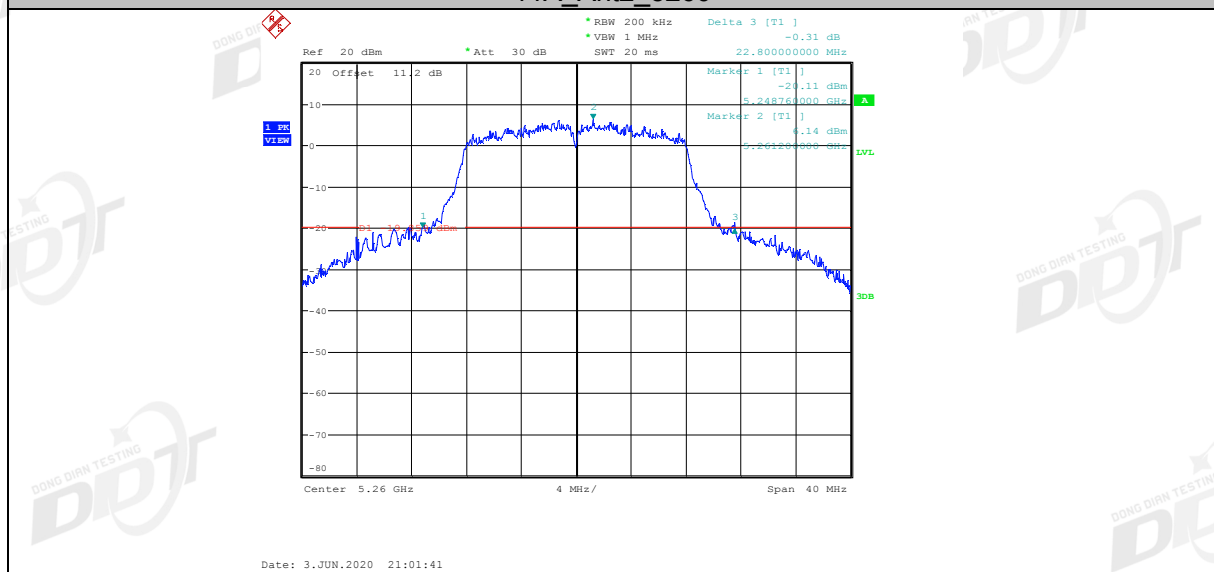
11A_Ant2_5240



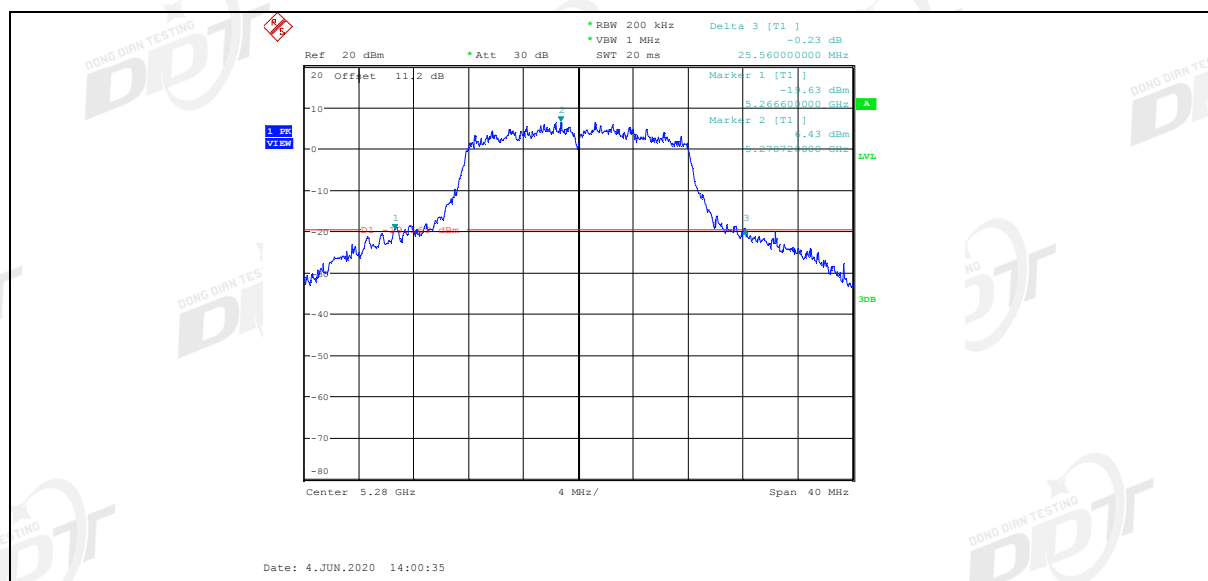
11A_Ant1_5260



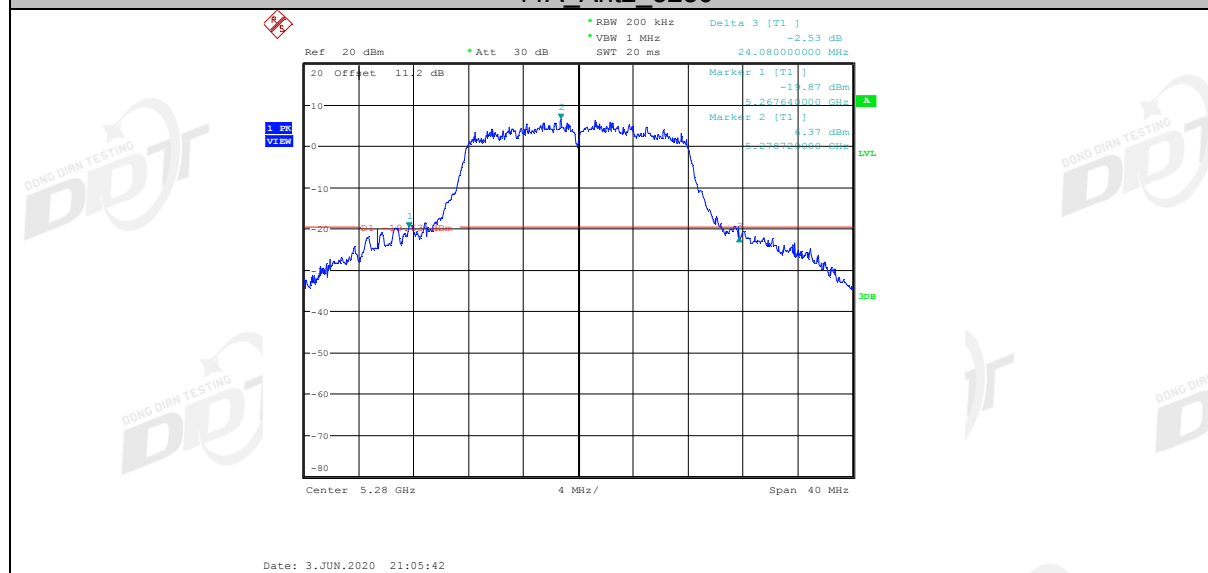
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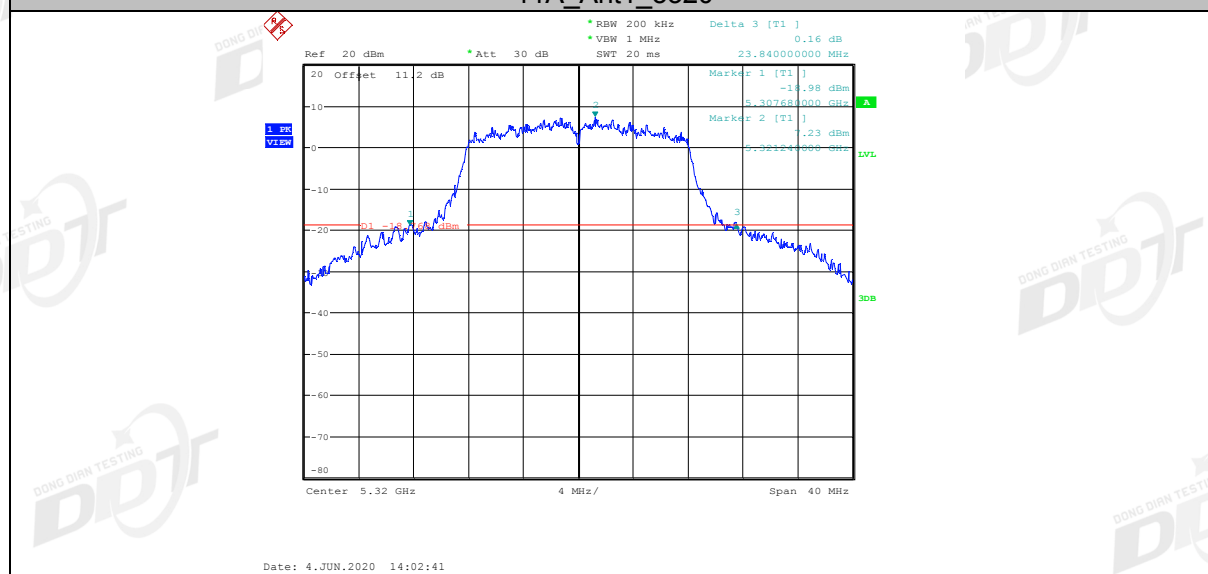
11A_Ant1_5280



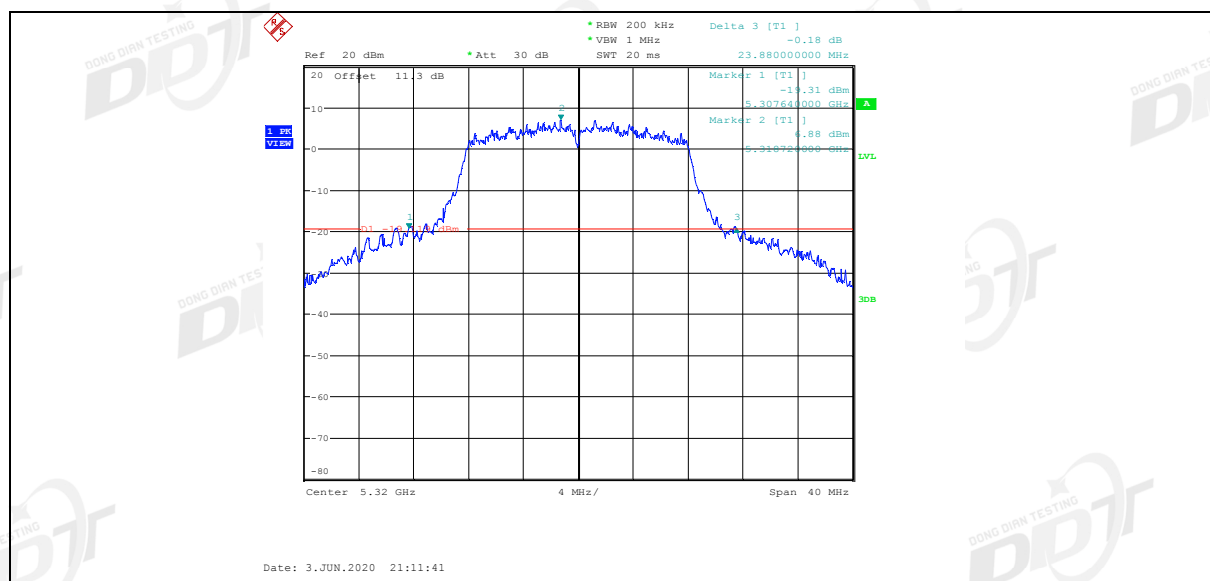
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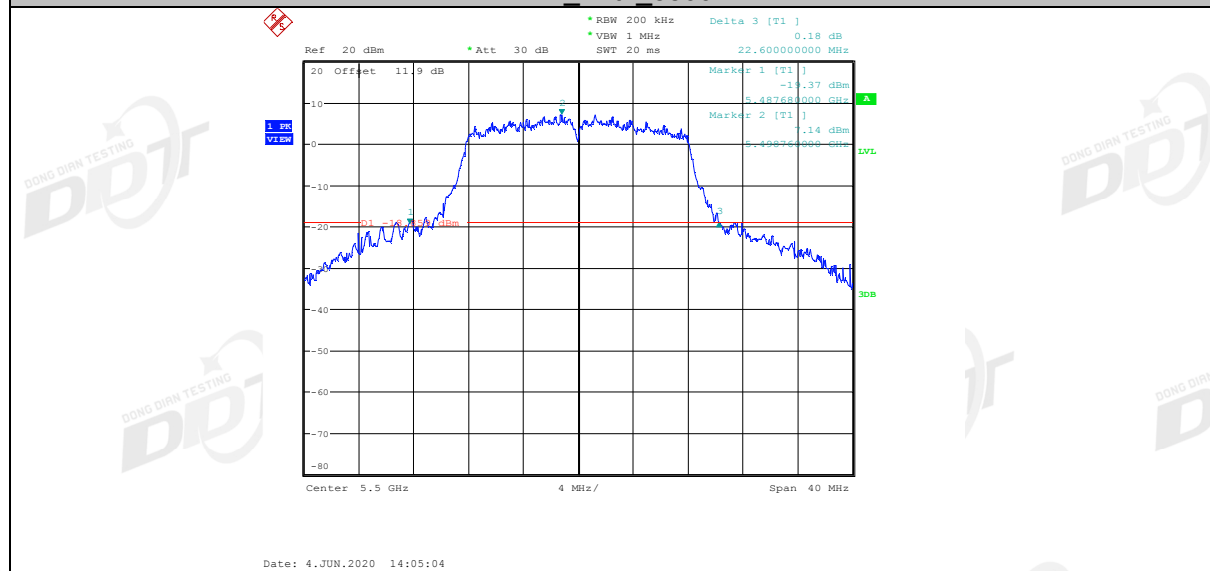
11A_Ant1_5320



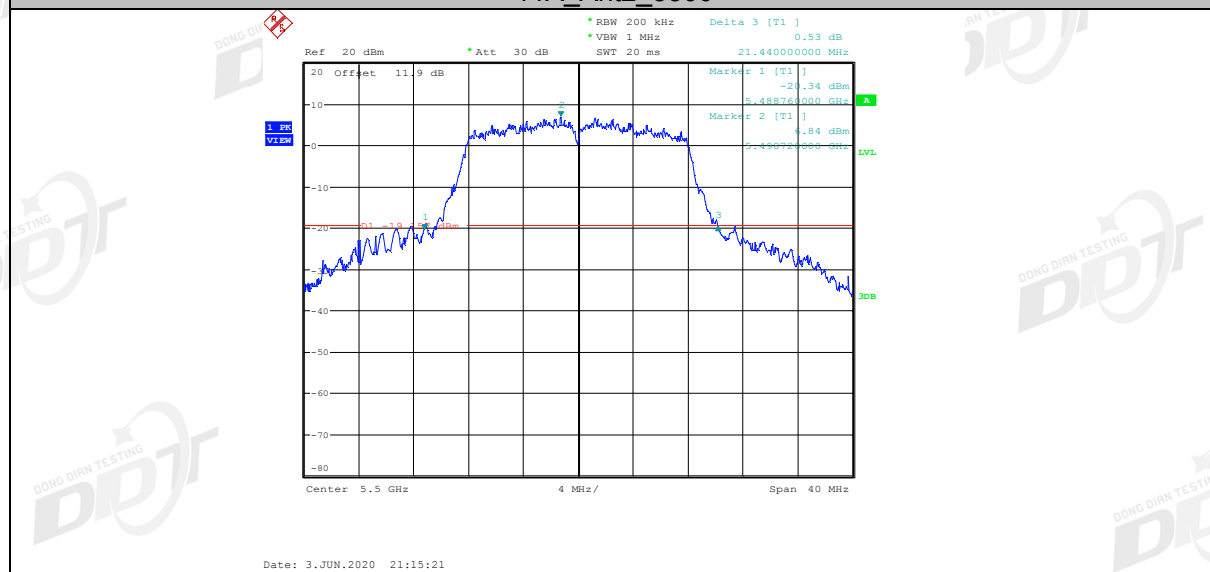
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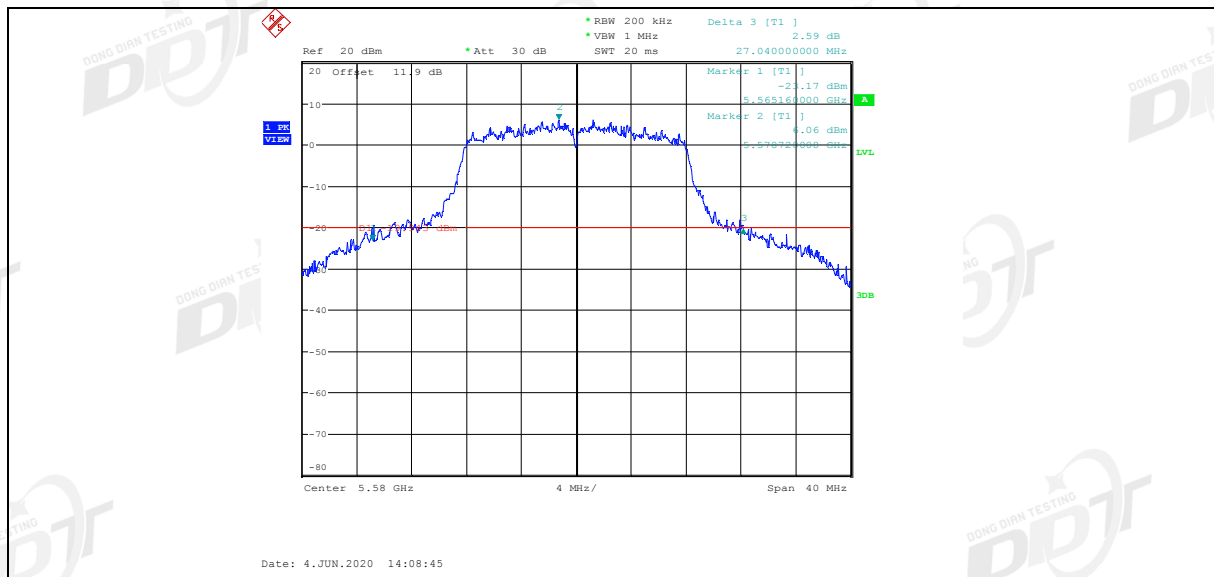
11A_Ant1_5500



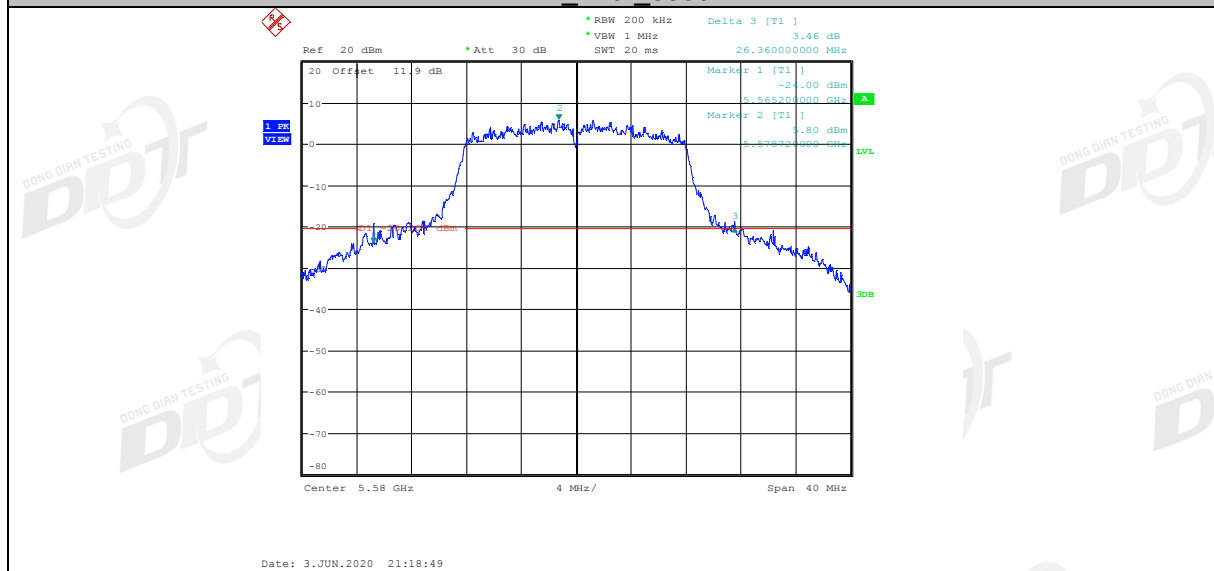
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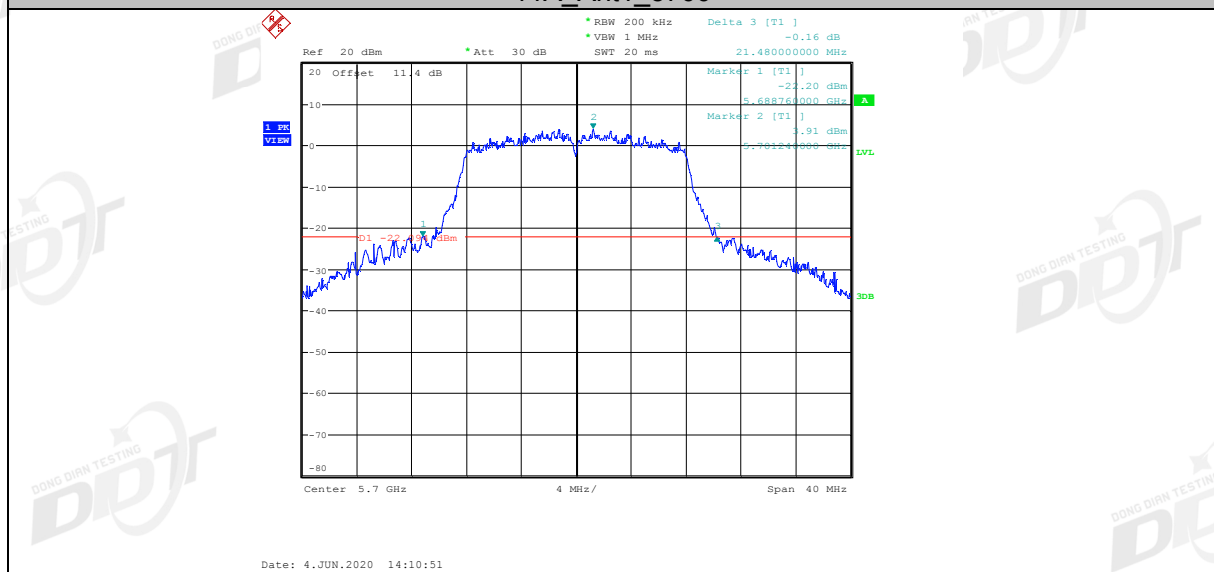
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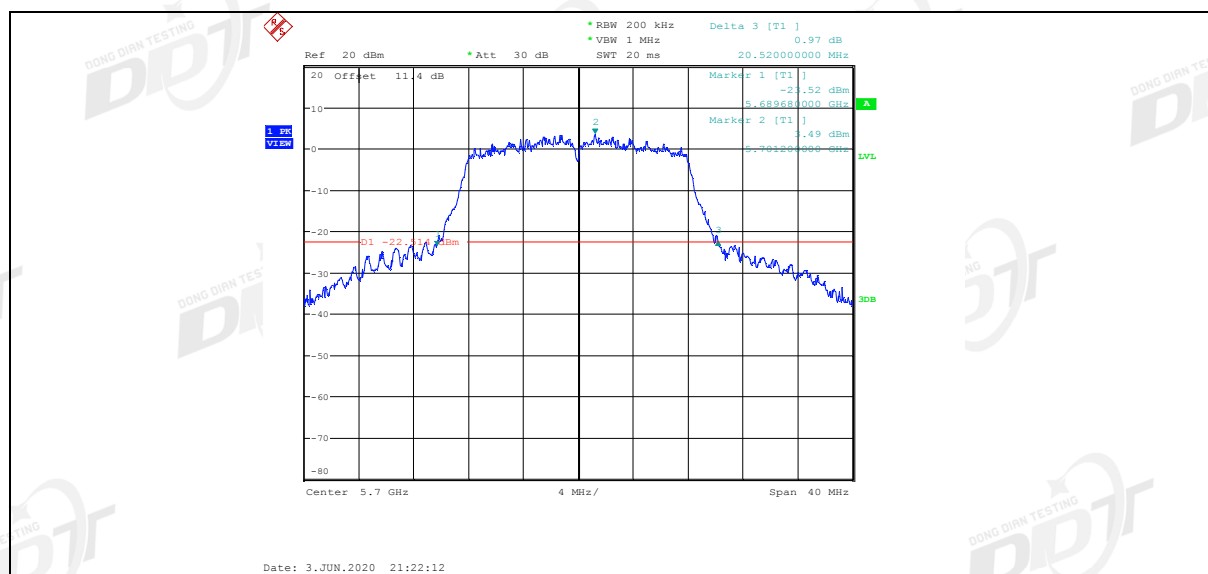
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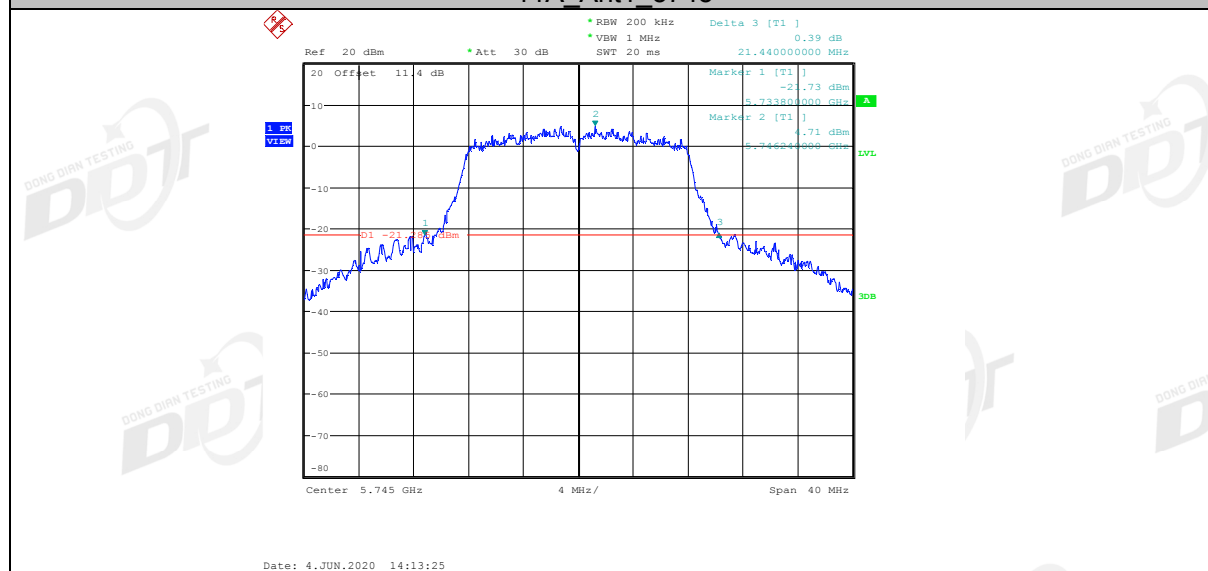
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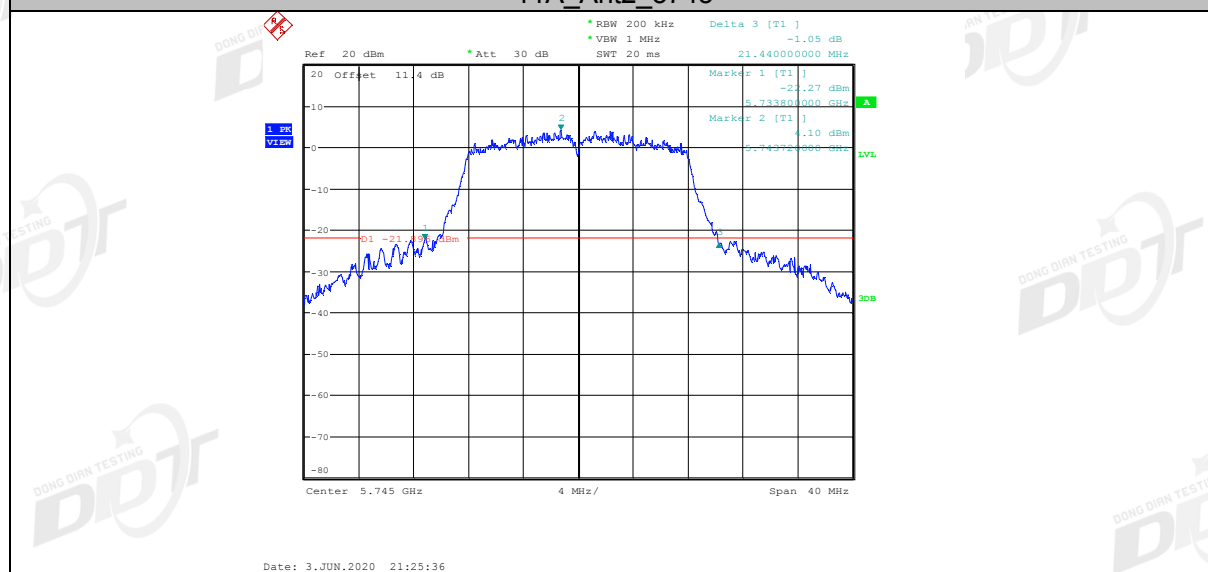
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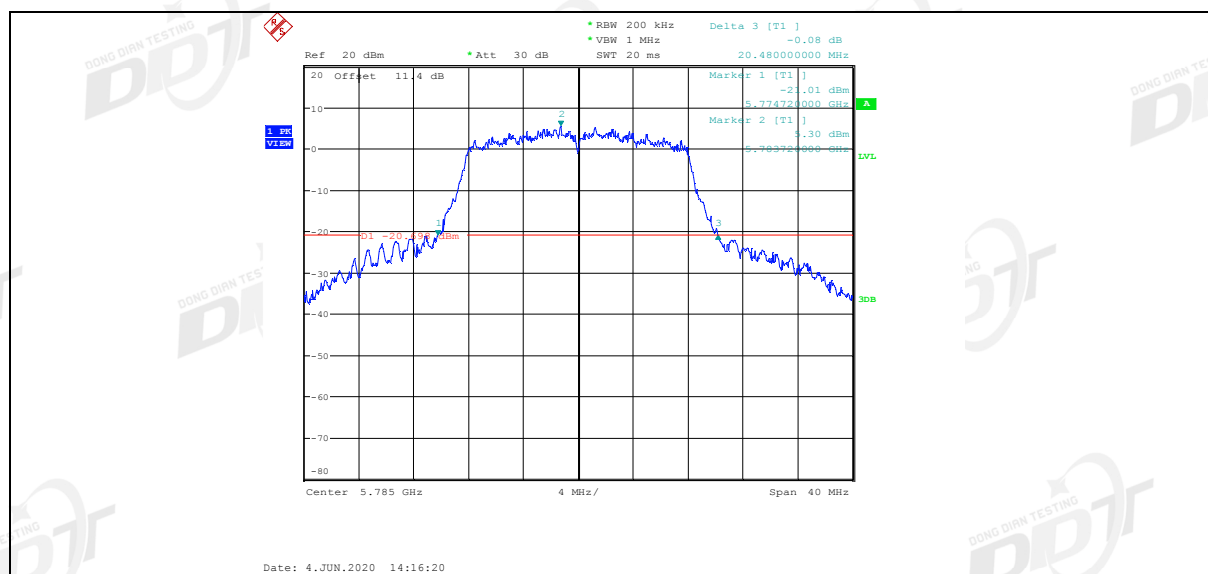
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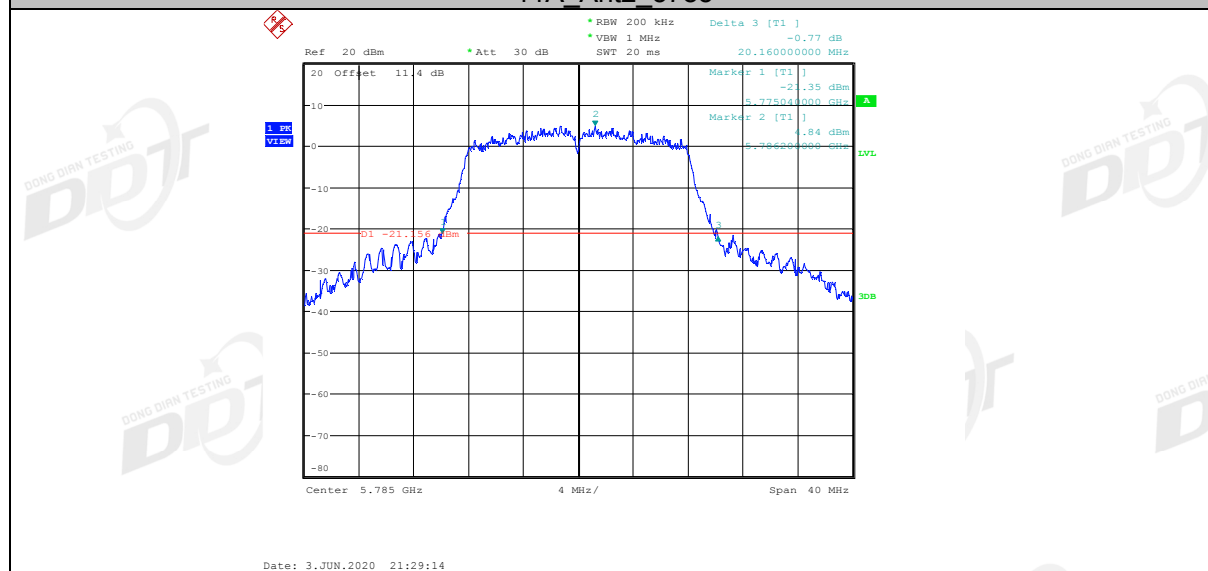
11A_Ant2_5745



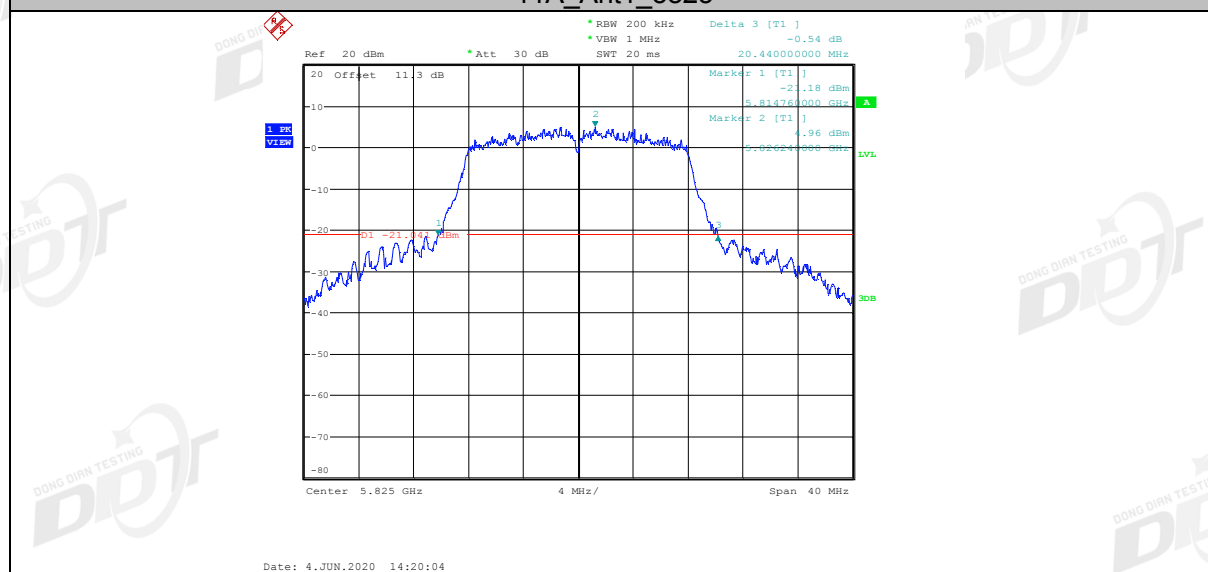
11A_Ant1_5785



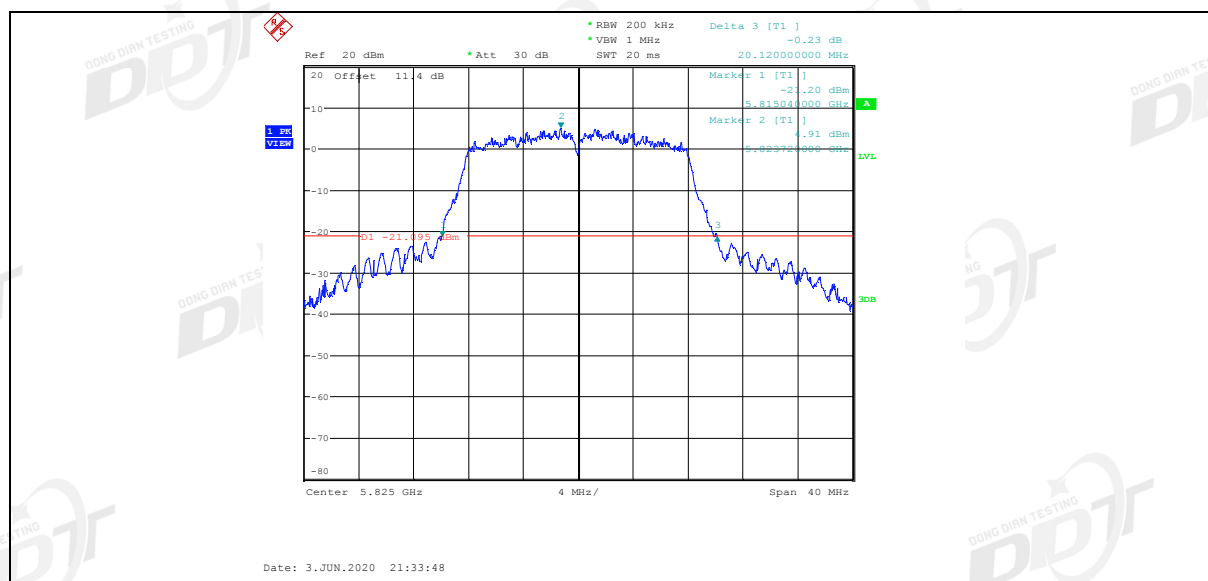
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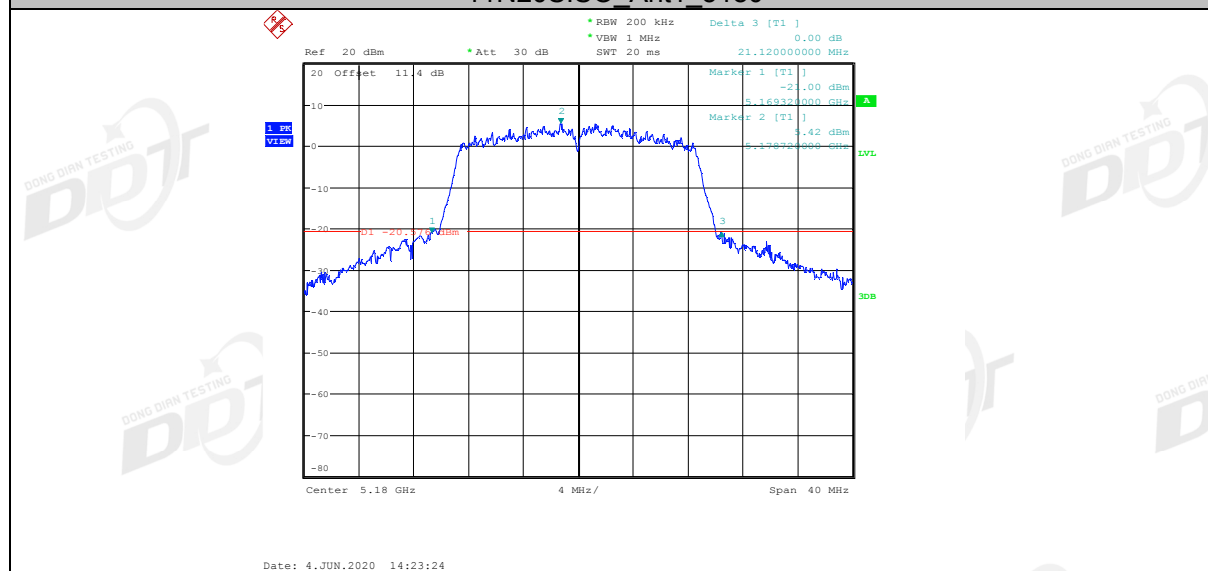
11A_Ant1_5825



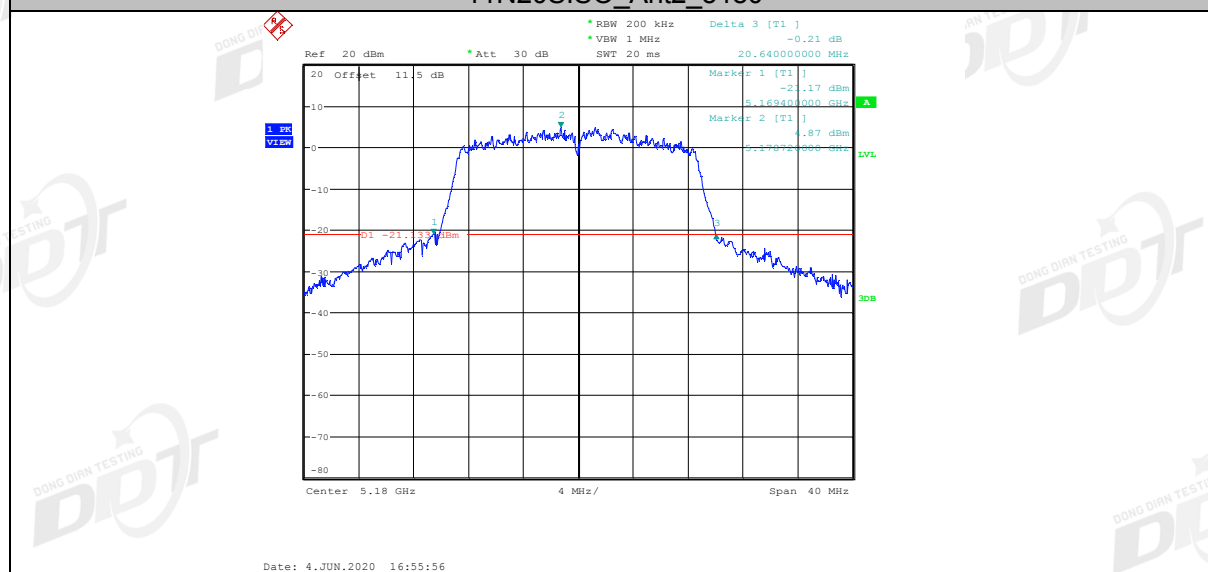
11A_Ant2_5825



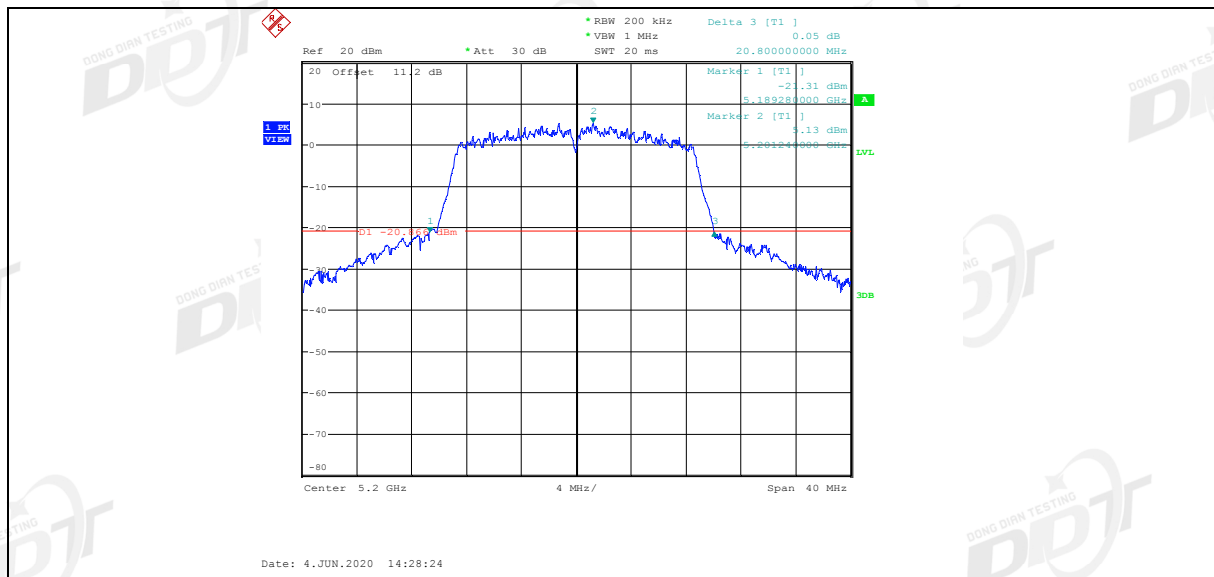
11N20SISO_Ant1_5180



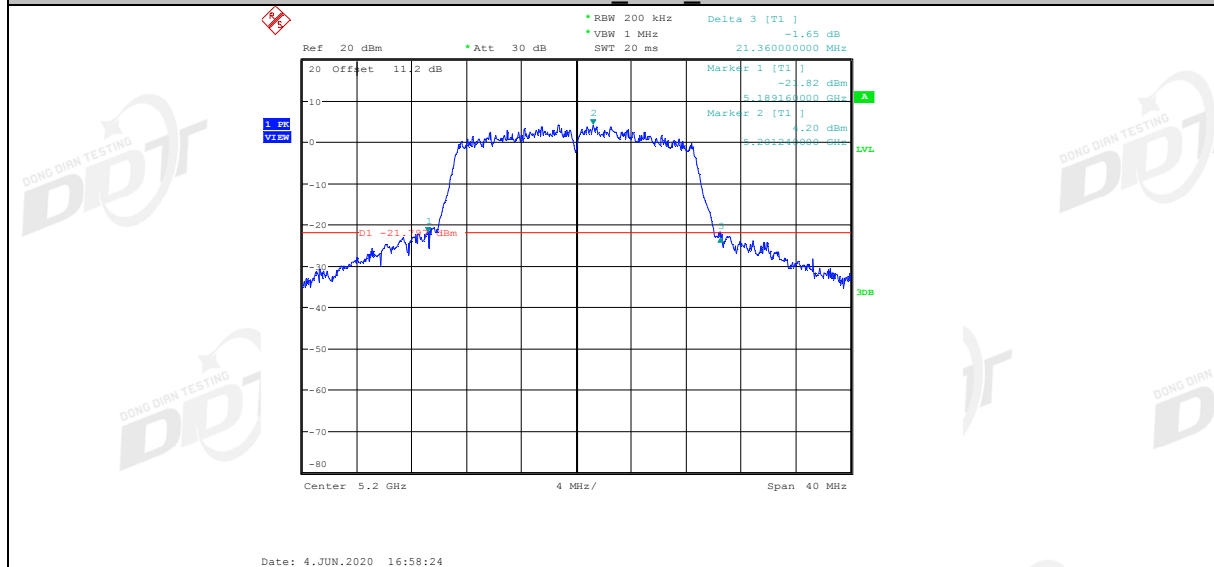
11N20SISO_Ant2_5180



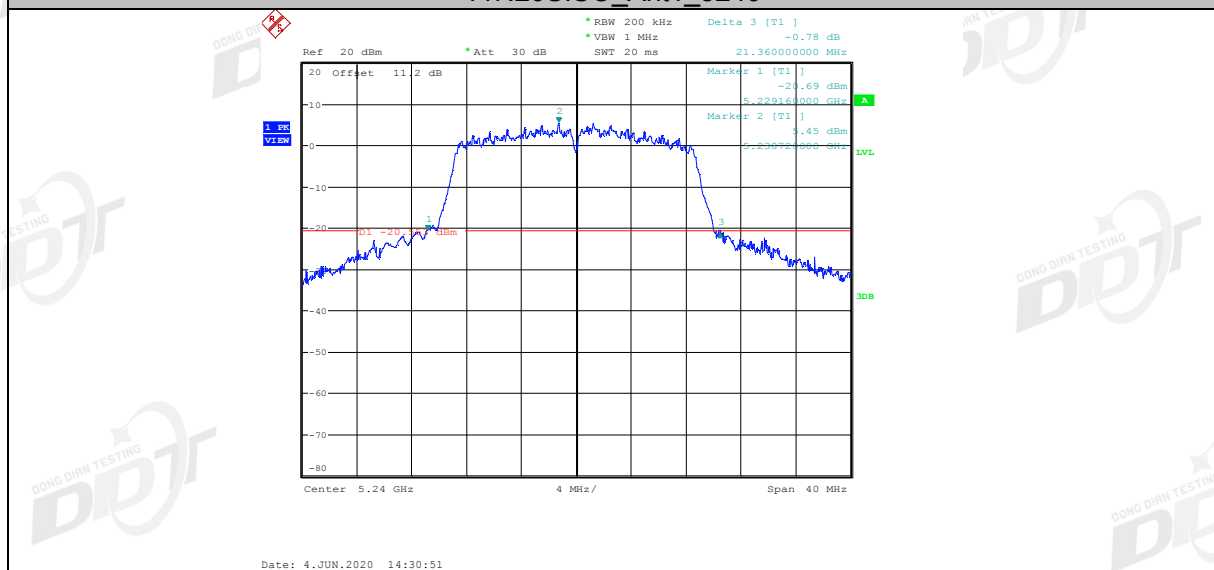
11N20SISO_Ant1_5200



11N20SISO_Ant2_5200



11N20SISO_Ant1_5240



11N20SISO_Ant2_5240



* RBW 200 kHz
 * VBW 1 MHz
 Delta 3 [T1]
 -0.69 dB
 21.520000000 GHz
 Ref 20 dBm
 * Att 30 dB
 SWT 20 ms
 20 Offset 11.2 dB
 Marker 1 [T1]
 -21.13 dBm
 5.249126000 GHz
 Marker 2 [T1]
 -12.12 dBm
 5.259736000 GHz
 0.1 -20 dBm
 Center 5.26 GHz
 4 Mhz/
 Span 40 Mhz

Date: 4.JUN.2020 14:33:05

Ref 20 dBm * Att 30 dB Delta 3 [T1]
 * RBW 200 kHz
 * VBW 1 MHz
 SWT 20 ms 21.480000000 MHz

20 Offset 11.2 dB
 -10
 0
 -10
 -20
 -30
 -40
 -50
 -60
 -70
 -80

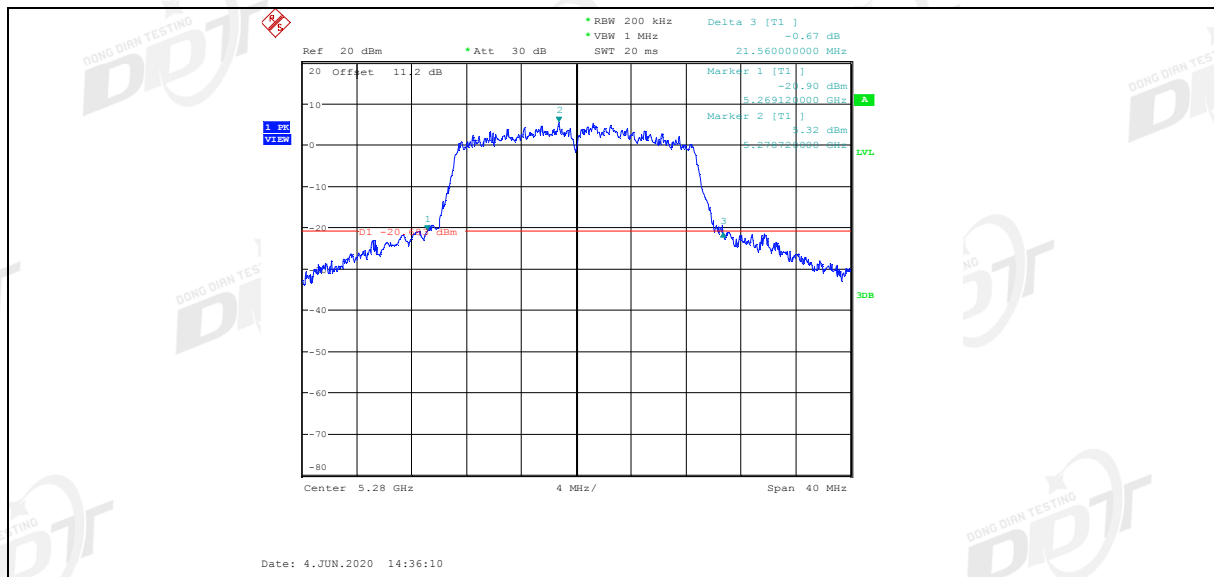
Marker 1 [T1]
 -20.80 dBm
 5.249200000 GHz

Marker 2 [T1]
 -5.24 dBm
 5.250700000 GHz

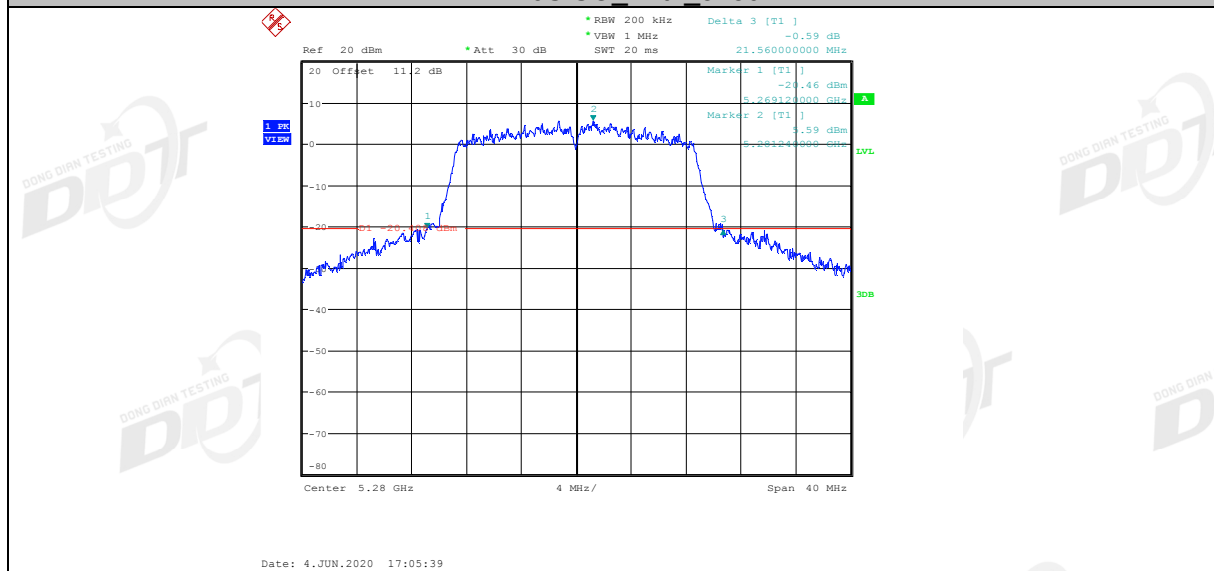
Center 5.26 GHz 4 MHz/ Span 40 MHz

Date: 4.JUN.2020 17:03:32

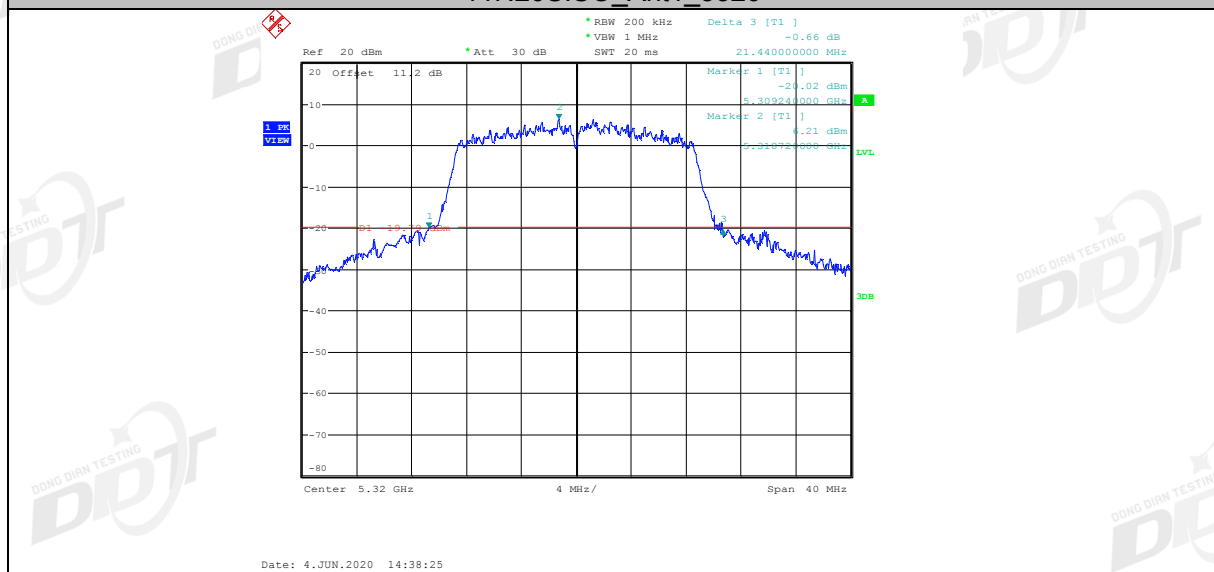
11N20SISO Ant1 5280



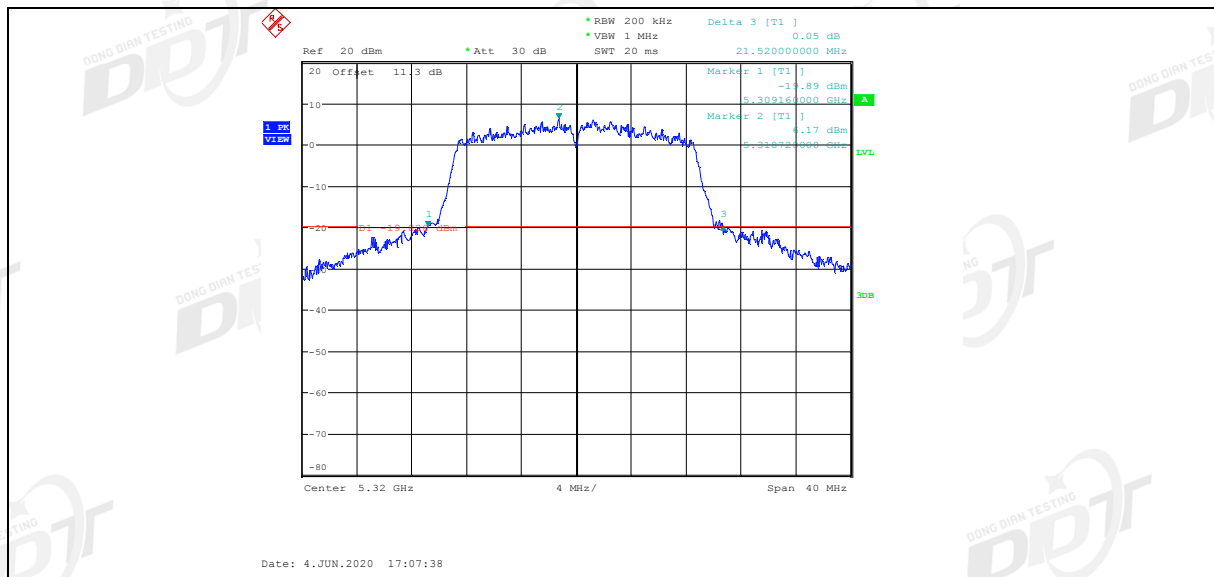
11N20SISO_Ant2_5280



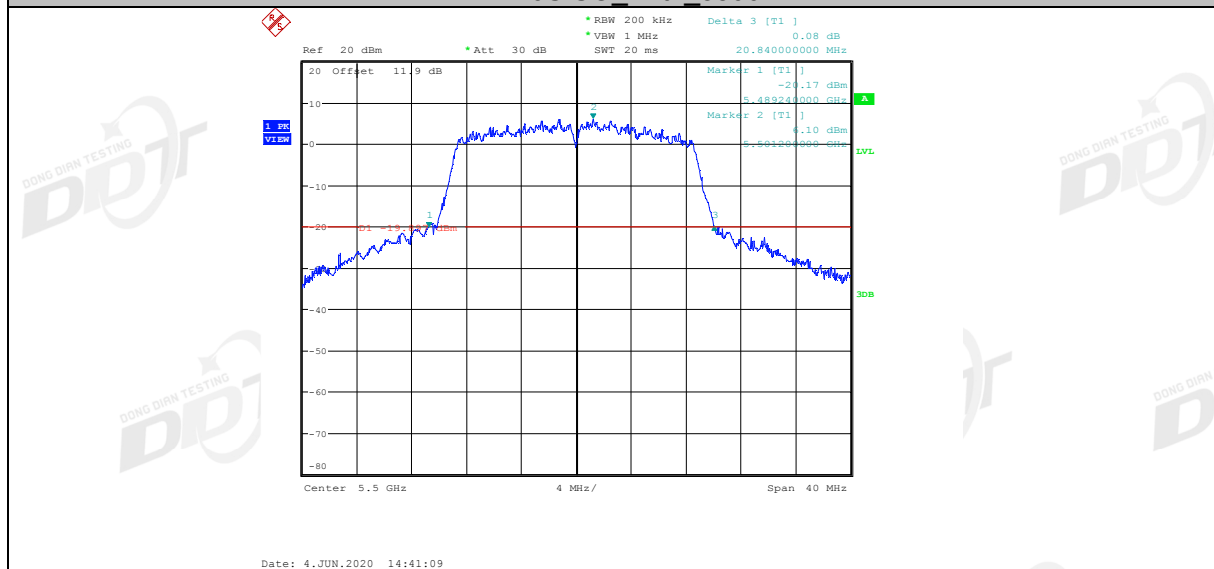
11N20SISO_Ant1_5320



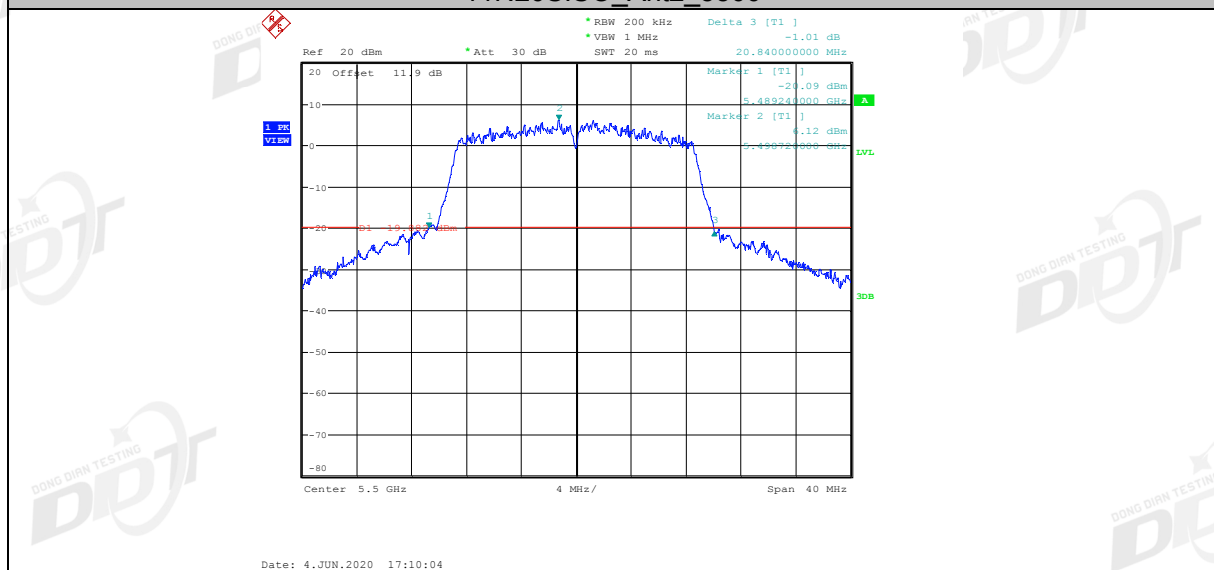
11N20SISO_Ant2_5320



11N20SISO_Ant1_5500



11N20SISO_Ant2_5500



11N20SISO_Ant1_5580



Ref 20 dBm * Att 30 dB

* RSW 200 kHz Delta 3 [T1]
 * VBW 1 MHz 1.11 dB
 * SWT 20 ms 22.320000000 MHz

20 Offset 11.9 dB

Marker 1 [T1]
 -22.88 dBm
 5.568280000 GHz

Marker 2 [T1]
 -19.97 dBm
 5.570700000 GHz

0.1 -21.5 dBm

Center 5.58 GHz 4 MHz/ Span 40 MHz

Date: 4.JUN.2020 17:12:22

1 PR
V1.00

Ref 20 dBm * Att 30 dB

RBW 200 kHz Delta 3 [T1]
VBW 1 MHz -0.08 dB
SWT 20 ms 20.320000000 MHz

20 Offset 11.4 dB

Marker 1 [T1]
-22.94 dBm
5.688888000 GHz

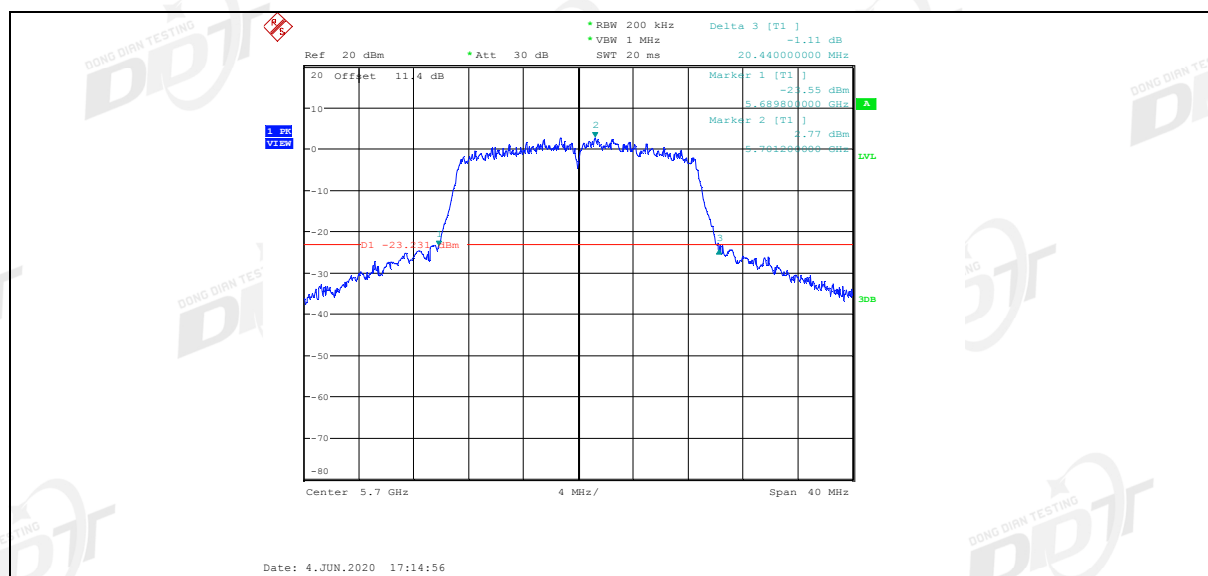
Marker 2 [T1]
-3.07 dBm
5.690122000 GHz

01 -22.926 dBm

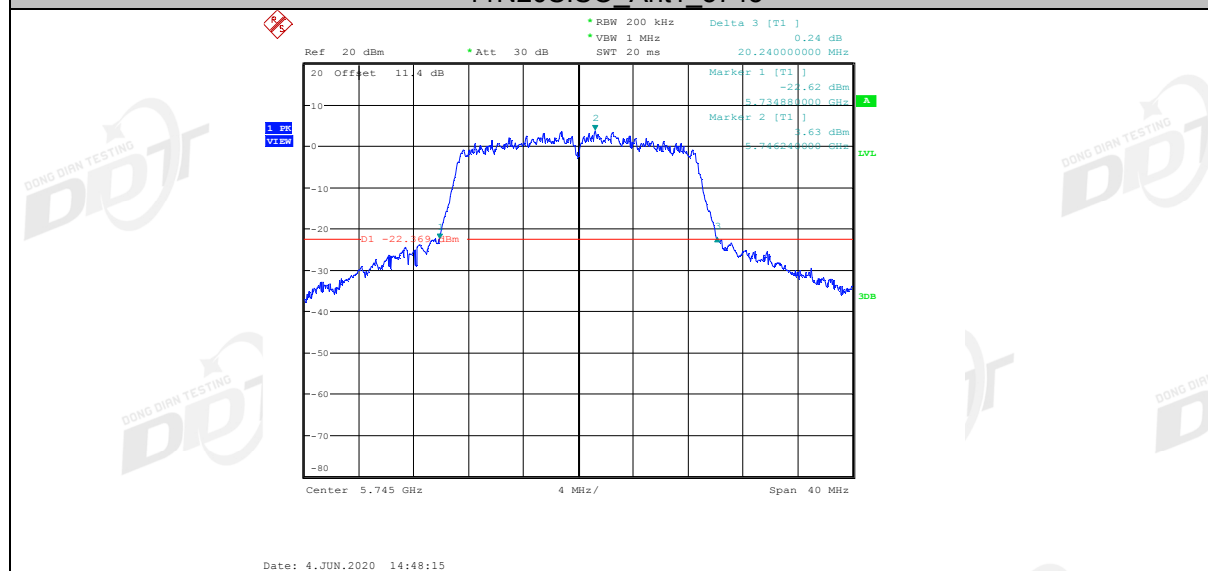
Center 5.7 GHz 4 MHz/ Span 40 MHz

Date: 4.JUN.2020 14:45:50

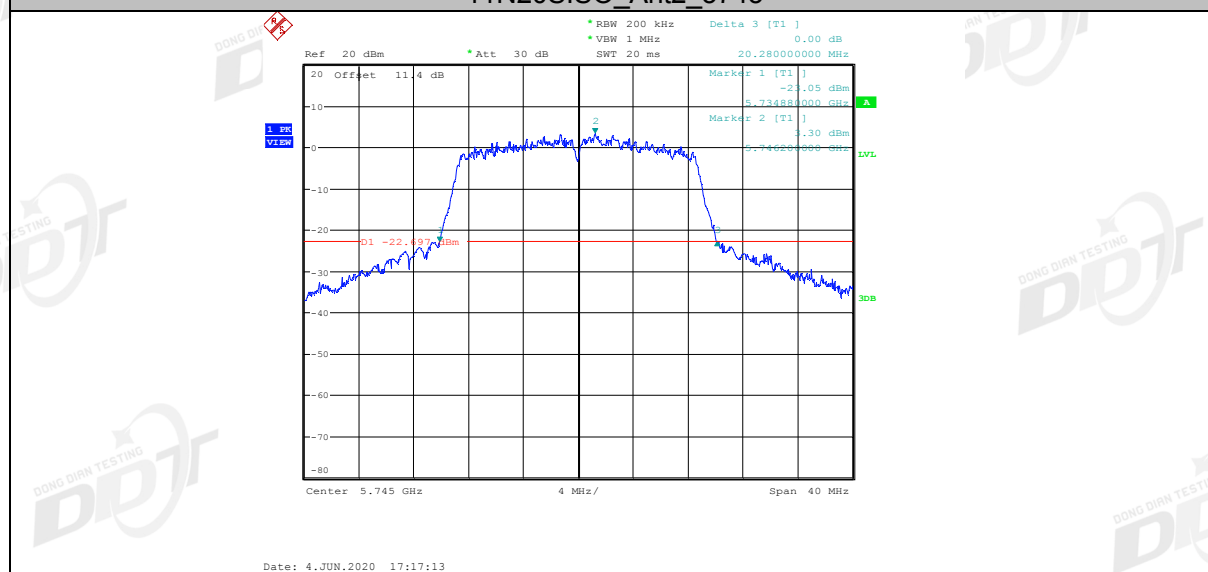
11N20SISO Ant2 5700



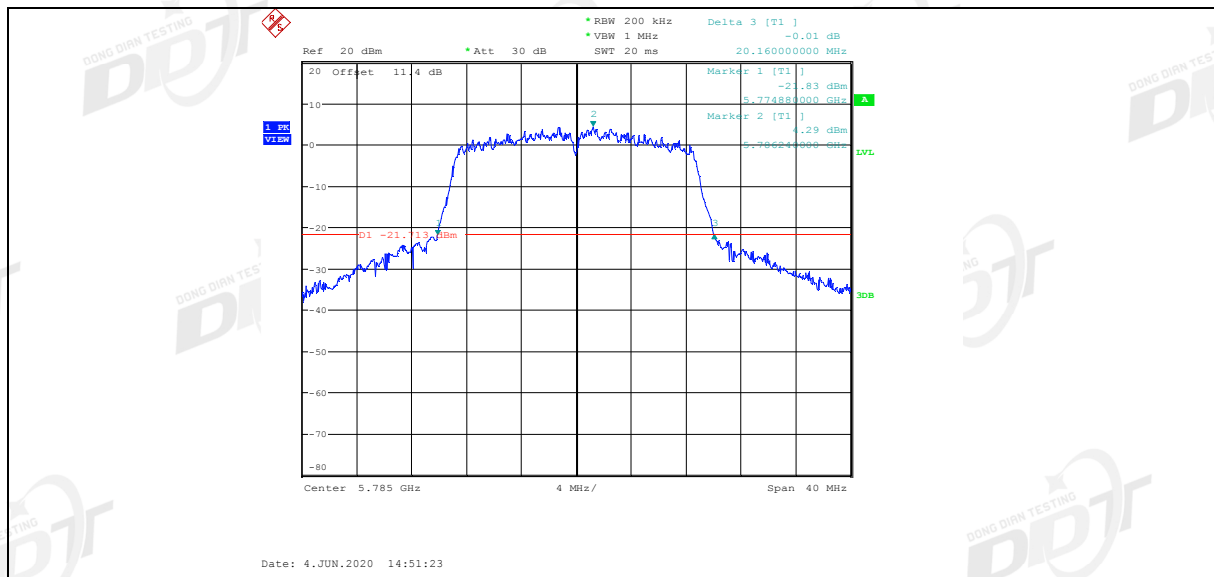
11N20SISO_Ant1_5745



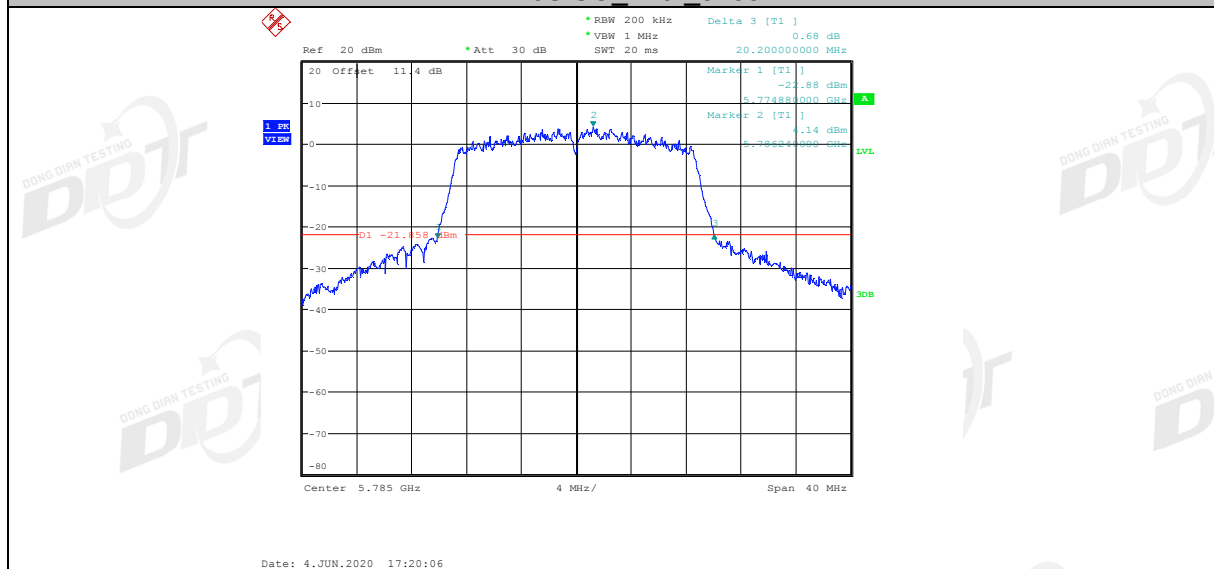
11N20SISO_Ant2_5745



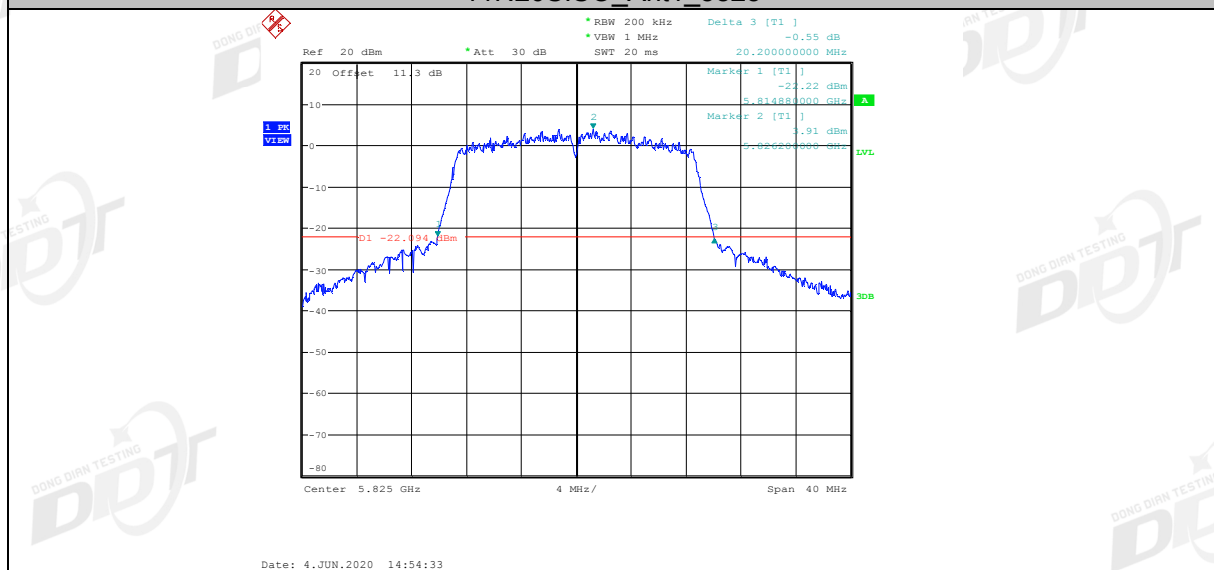
11N20SISO_Ant1_5785



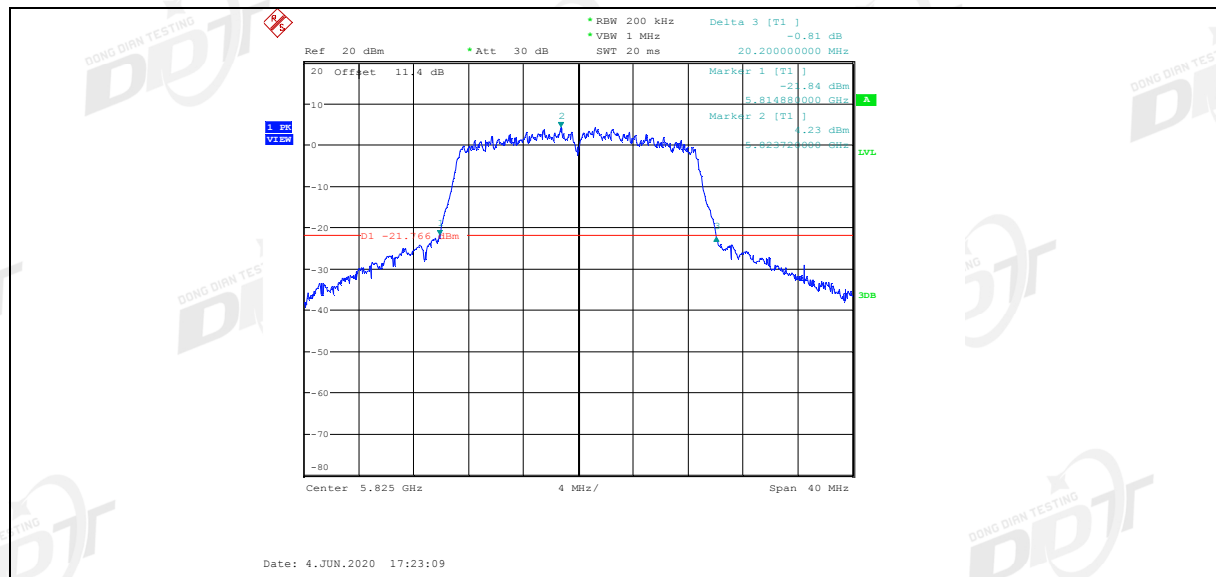
11N20SISO_Ant2_5785



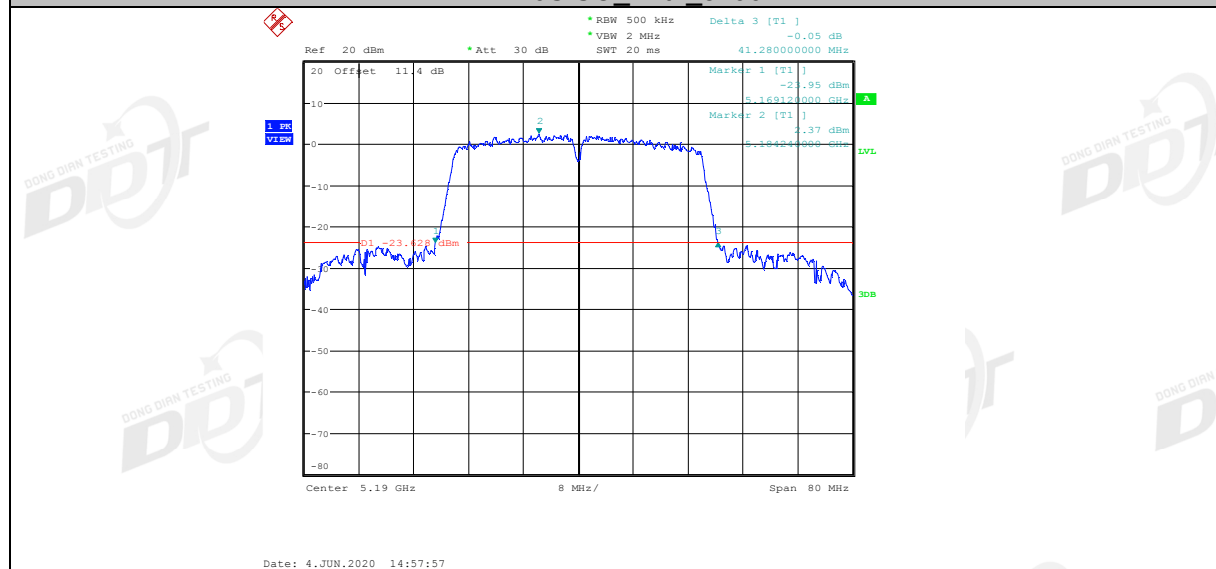
11N20SISO_Ant1_5825



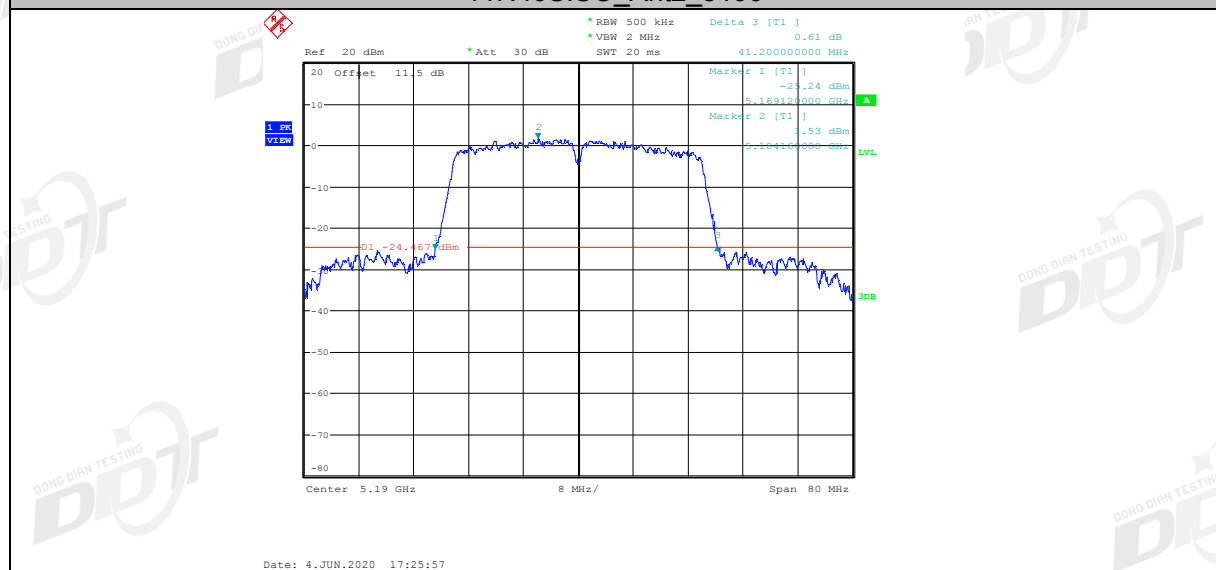
11N20SISO_Ant2_5825



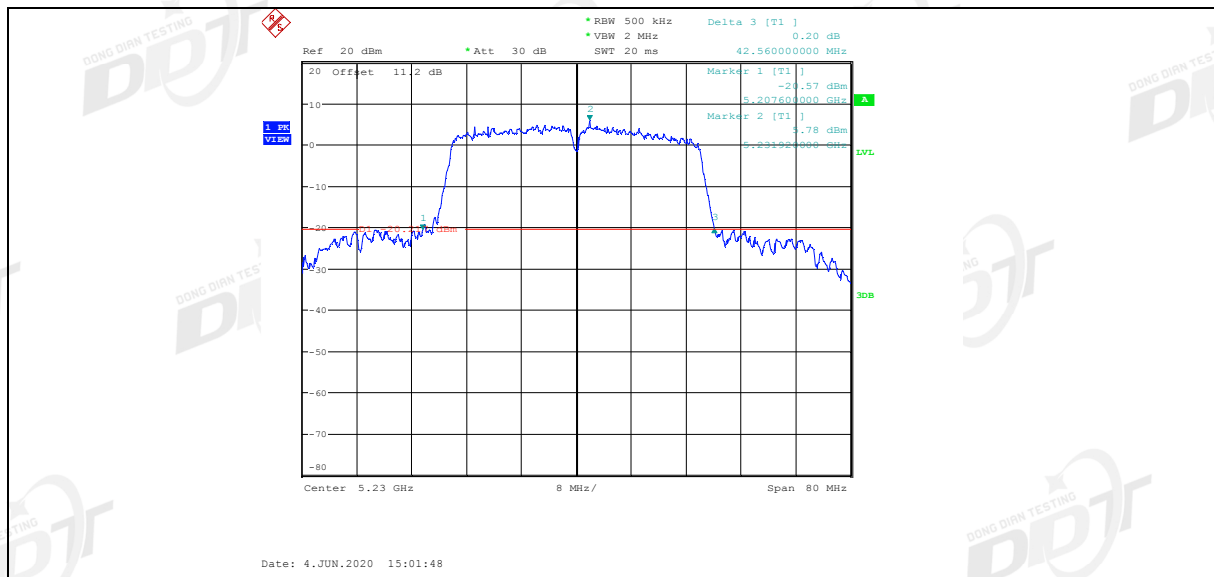
11N40SISO_Ant1_5190



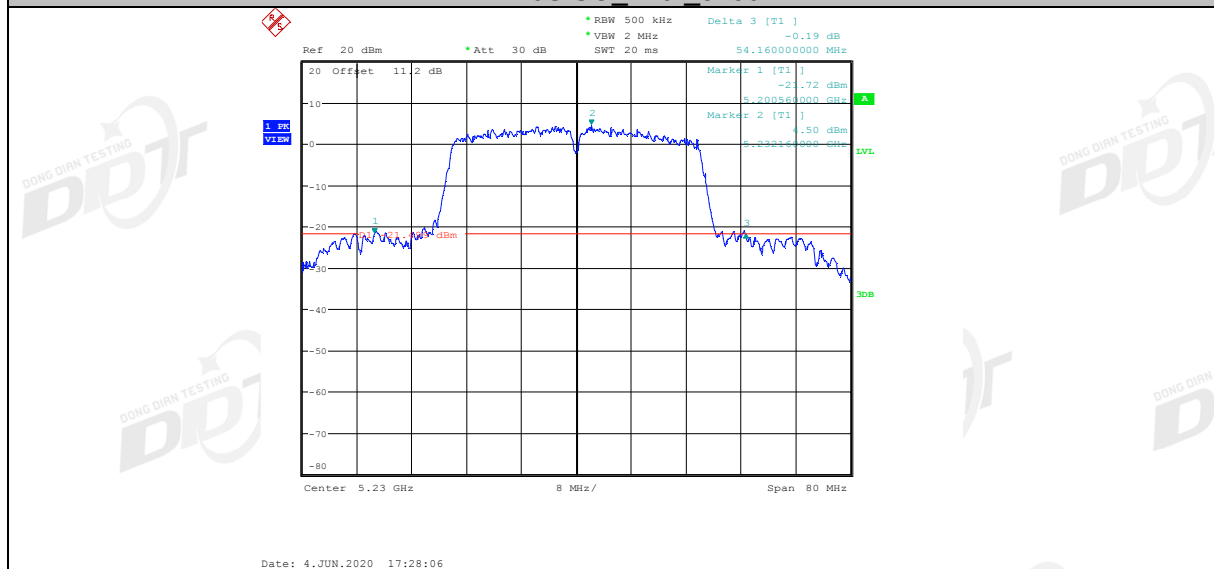
11N40SISO_Ant2_5190



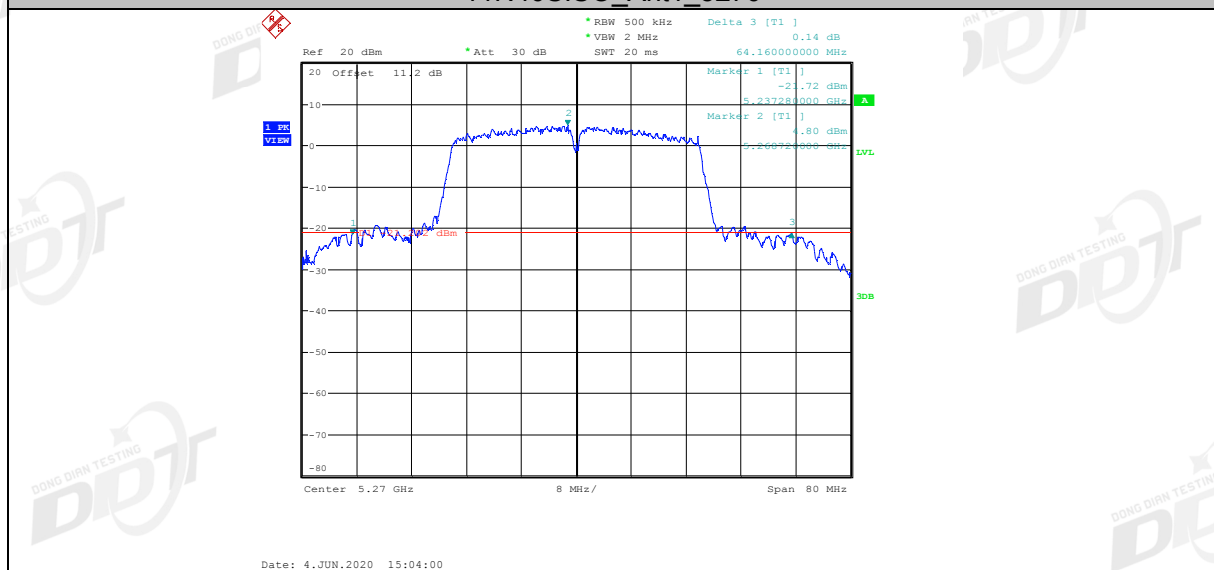
11N40SISO_Ant1_5230



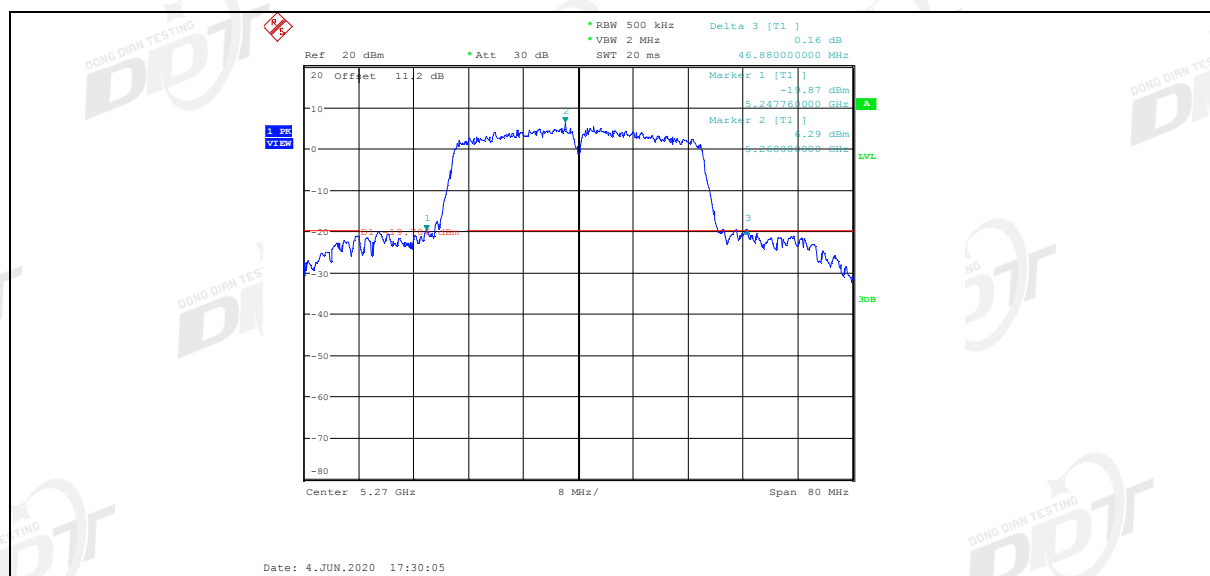
11N40SISO_Ant2_5230



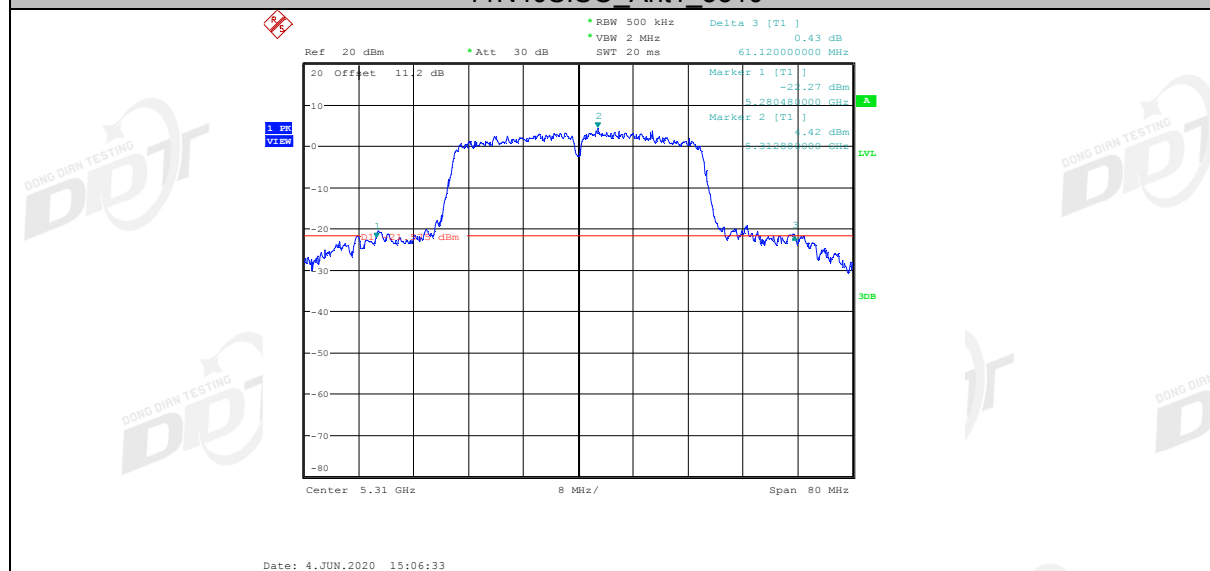
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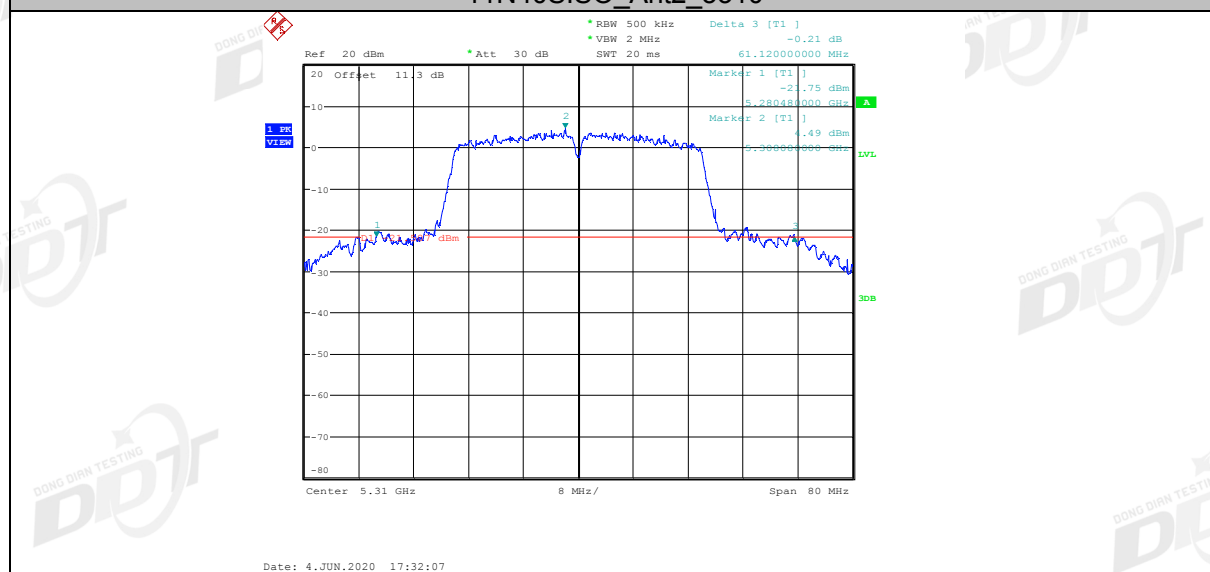
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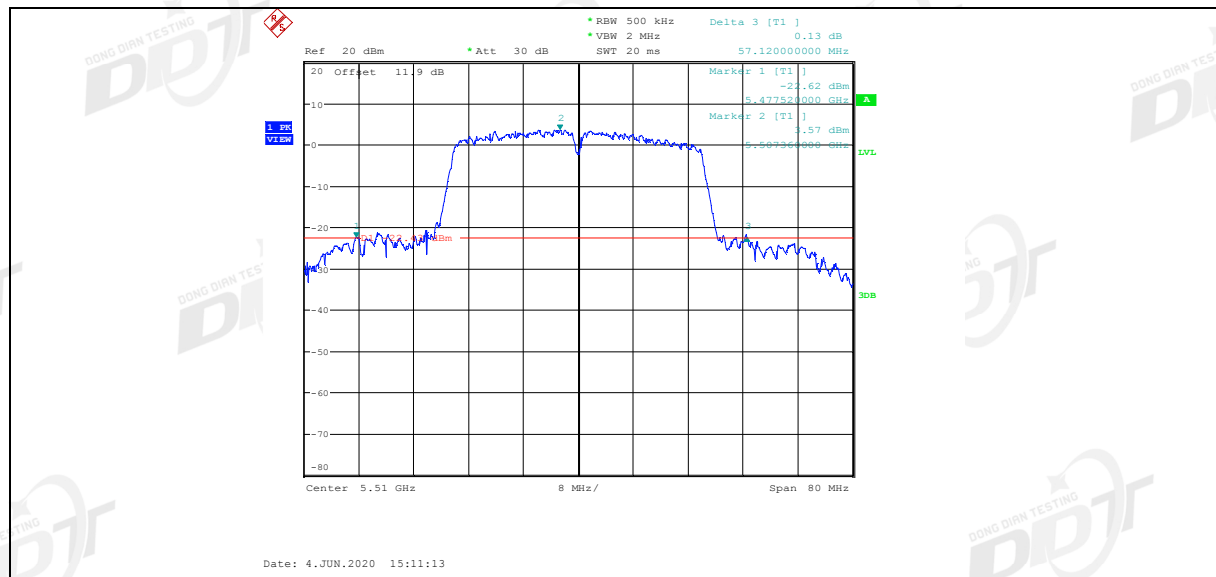
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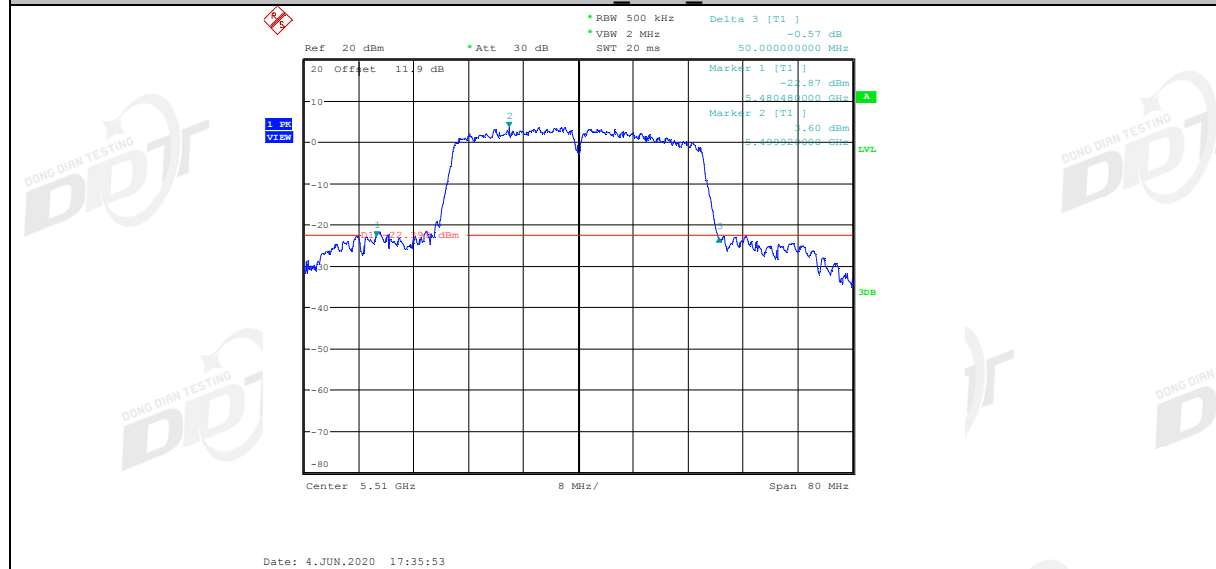
11N40SISO_Ant2_5310



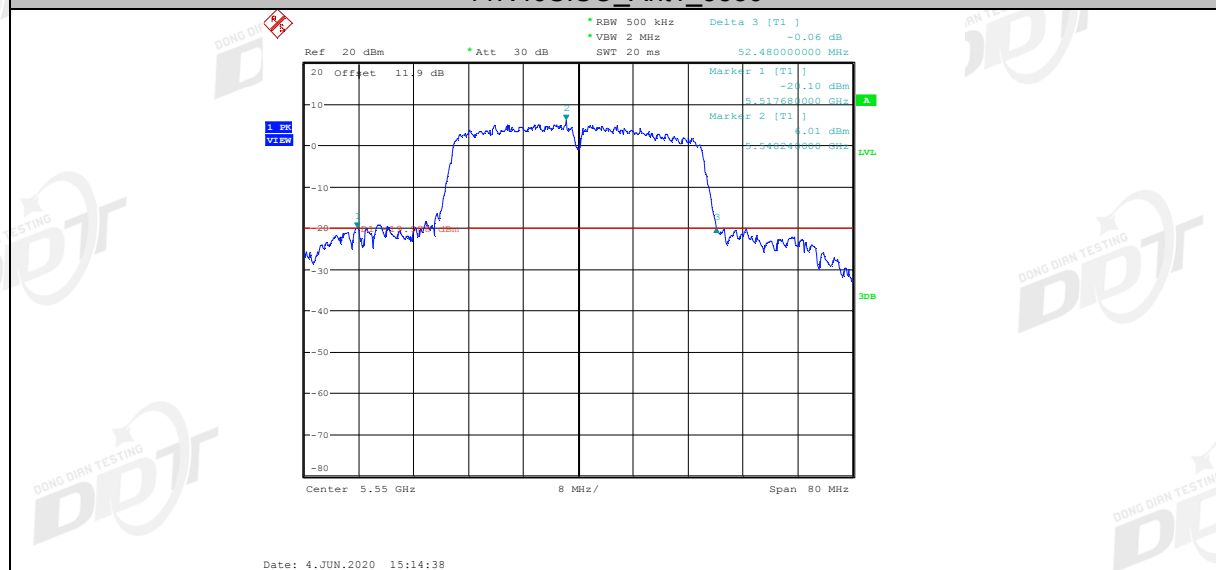
11N40SISO_Ant1_5510



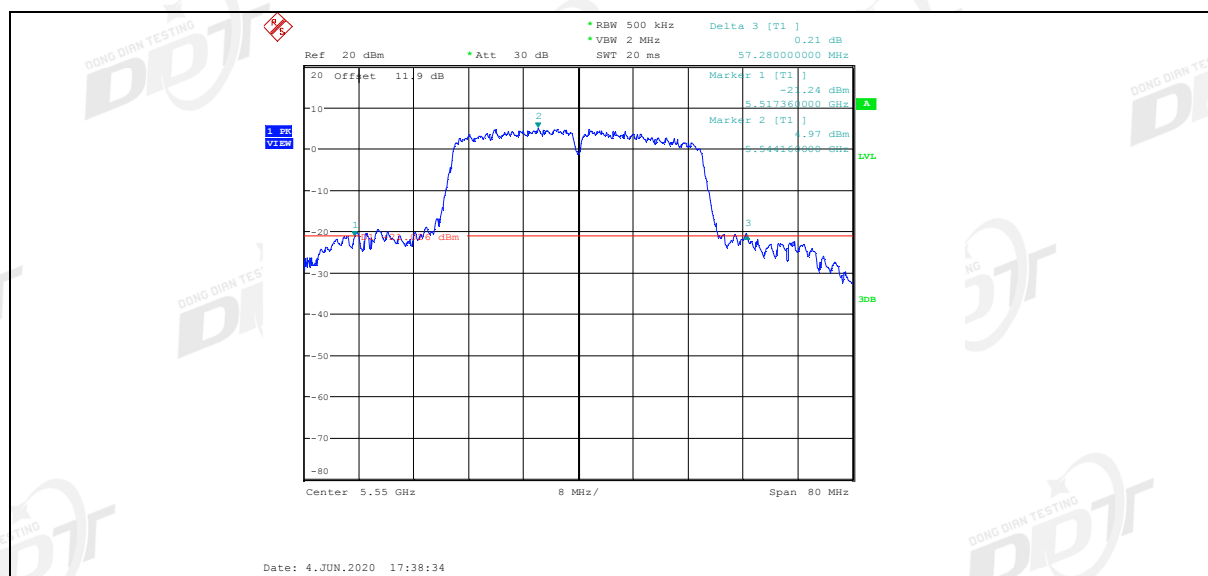
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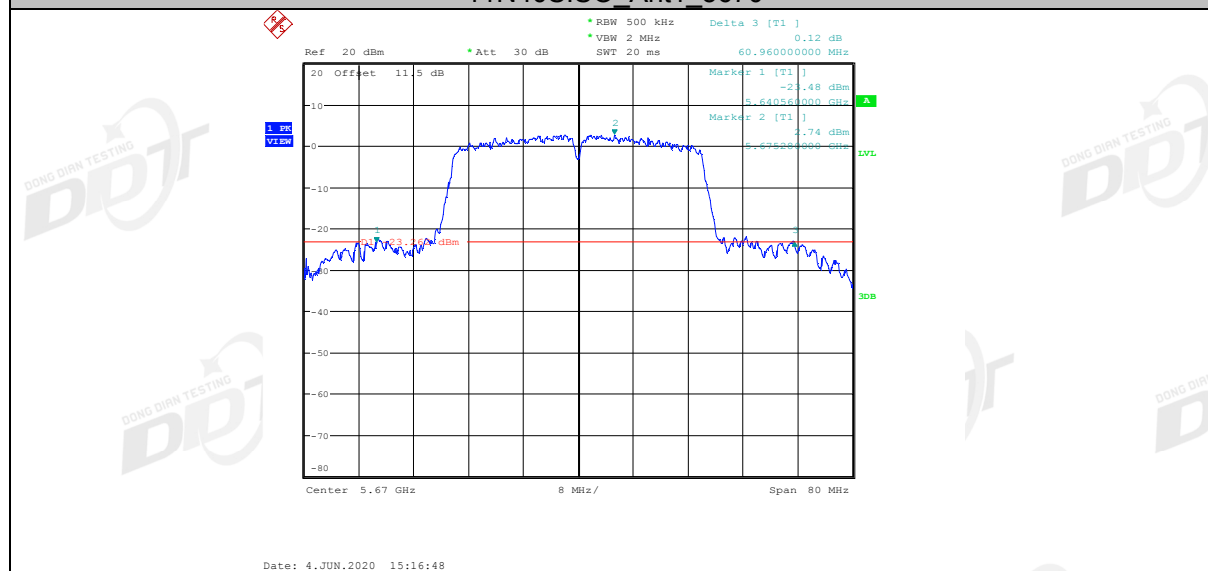
11N40SISO_Ant1_5550



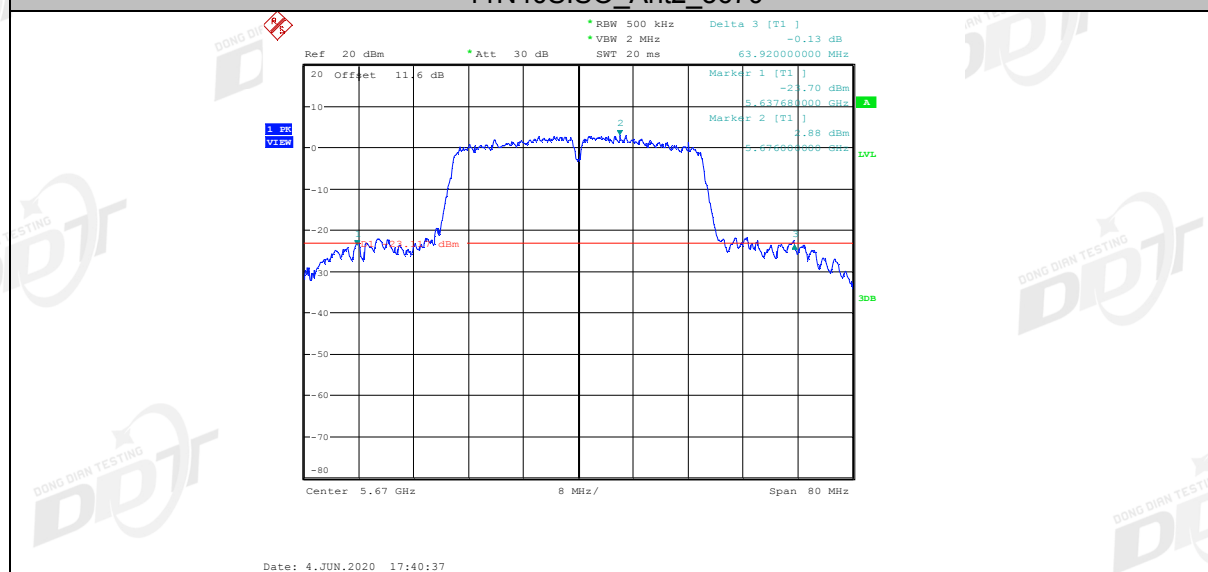
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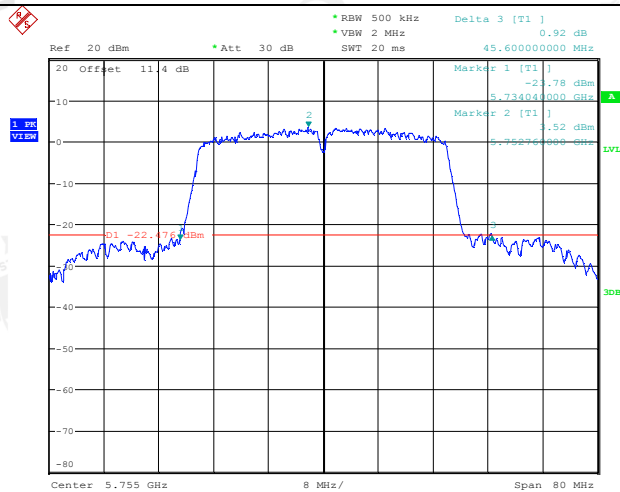
11N40SISO_Ant1_5670



11N40SISO_Ant2_5670

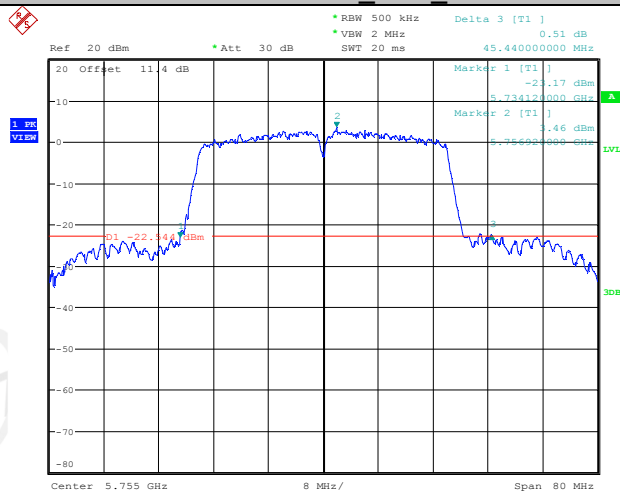


11N40SISO_Ant1_5755



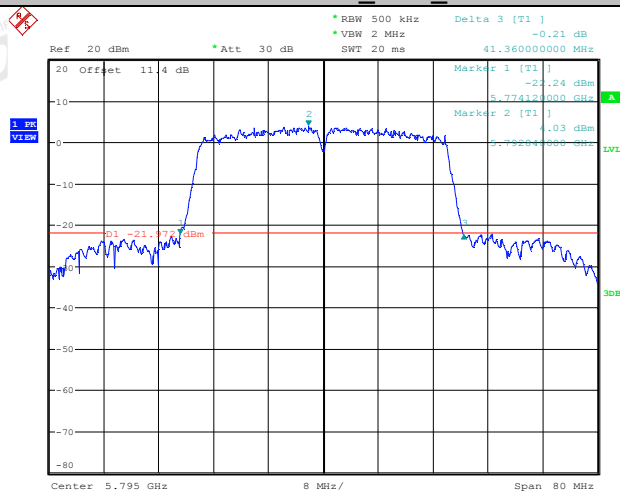
Date: 4.JUN.2020 15:18:58

11N40SISO_Ant2_5755



Date: 4.JUN.2020 17:42:57

11N40SISO_Ant1_5795



Date: 4.JUN.2020 15:22:35

11N40SISO_Ant2_5795



* RSBW 200 kHz Delta 3 [T1]
 * VBW 1 MHz 1.30 dB
 SWT 20 ms 20.160000000 MHz

Ref 20 dBm * Att 30 dB
 20 Offset 11.4 dB

1.30 VdB
 30 dB

Marker 1 [T1]
 -20.75 dBm
 5.169840000 GHz

Marker 2 [T1]
 -5.59 dBm
 5.183440000 GHz

20 -20.08 dBm

Center 5.18 GHz 4 MHz/ Span 40 MHz

Date: 4.JUN.2020 15:25:24

* RBW 200 kHz Delta 3 [T1]
 * VBW 1 MHz 0.18 dB
 * Att 30 dB 20.200000000 MHz
 Ref 20 dBm
 * Att 30 dB
 SWT 20 ms

20 Offset 11.5 dB
 10
 0
 -10
 -20
 -30
 -40
 -50
 -60
 -70
 -80

Marker 1 [T1]
 -21.47 dBm
 5.163840000 GHz
 Marker 2 [T1]
 -1.79 dBm
 5.170720000 GHz

0.1 -21.209 dBm

Center 5.18 GHz
 4 MHz/
 Span 40 MHz

Date: 4.JUN.2020 17:48:32

11AC20SISO Ant1 5200



* RBW 200 kHz Delta 3 [T1]
 * VBW 1 MHz -0.43 dB
 * SWT 20 ms 20.880000000 MHz

Ref 20 dBm * Att 30 dB

20 Offset 11.2 dB

1 PR
 VSW

Marker 1 [T1]
 -22.36 dBm
 5.183766000 GHz

Marker 2 [T1]
 -29 dBm
 5.198750000 GHz

D1 -21.71 dBm

Center 5.2 GHz 4 MHz/ Span 40 MHz

Date: 4.JUN.2020 17:52:21

Ref 20 dBm * Att 30 dB Delta 3 [T1] -0.71 dB
* RBW 200 kHz 21.200000000 MHz
* VBW 1 MHz
SWT 20 ms

20 Offset 11.2 dB
-10
0
-10
-20
-30
-40
-50
-60
-70
-80

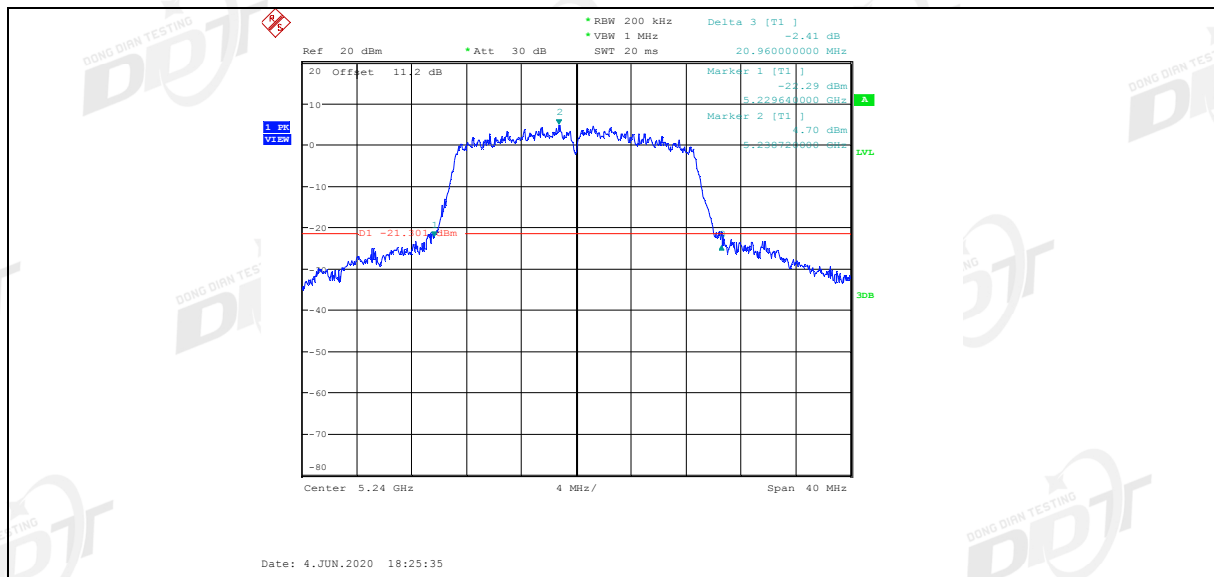
Marker 1 [T1]
-21.17 dBm
5.229376000 GHz
Marker 2 [T1]
-5.43 dBm
5.230726888 GHz

D1 -20.0 dBm

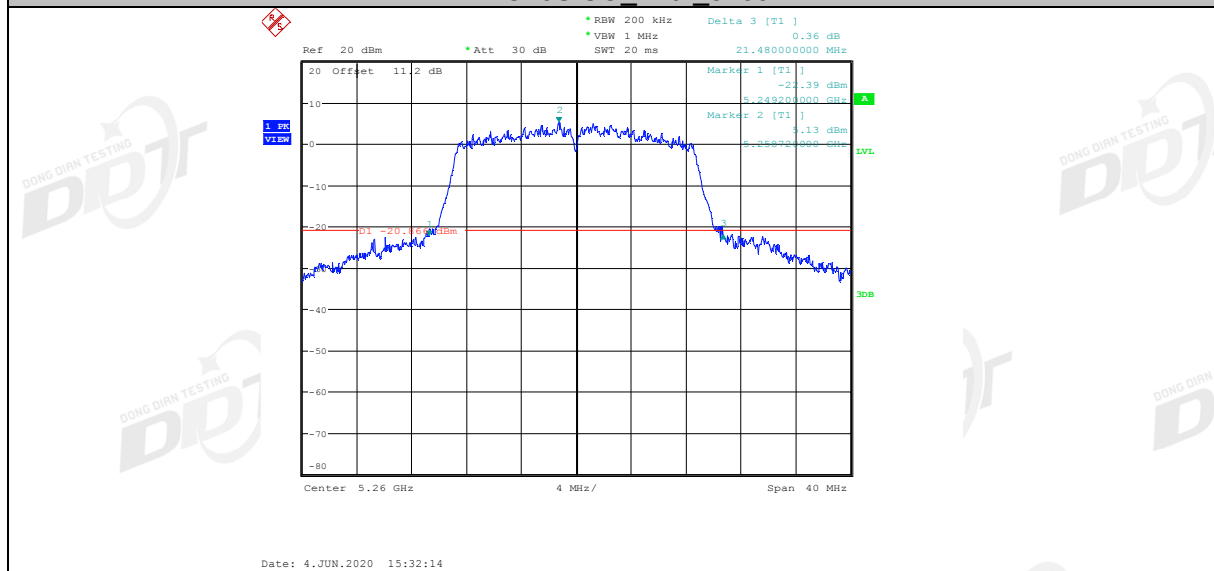
Center 5.24 GHz 4 MHz/ Span 40 MHz

Date: 4.JUN.2020 15:29:50

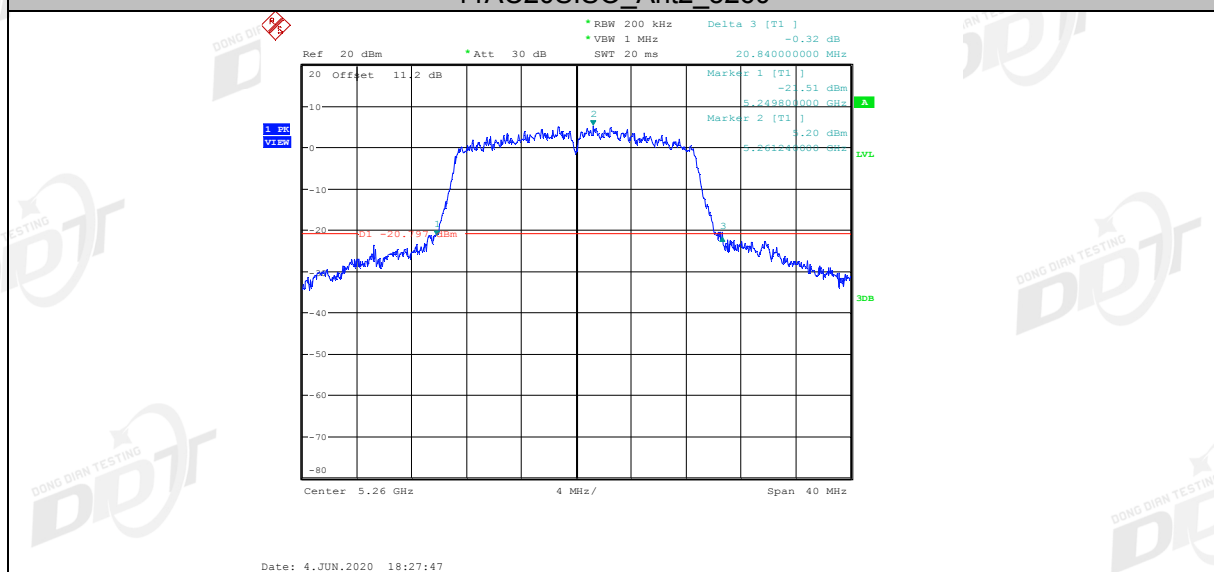
11AC20SISO Ant2 5240



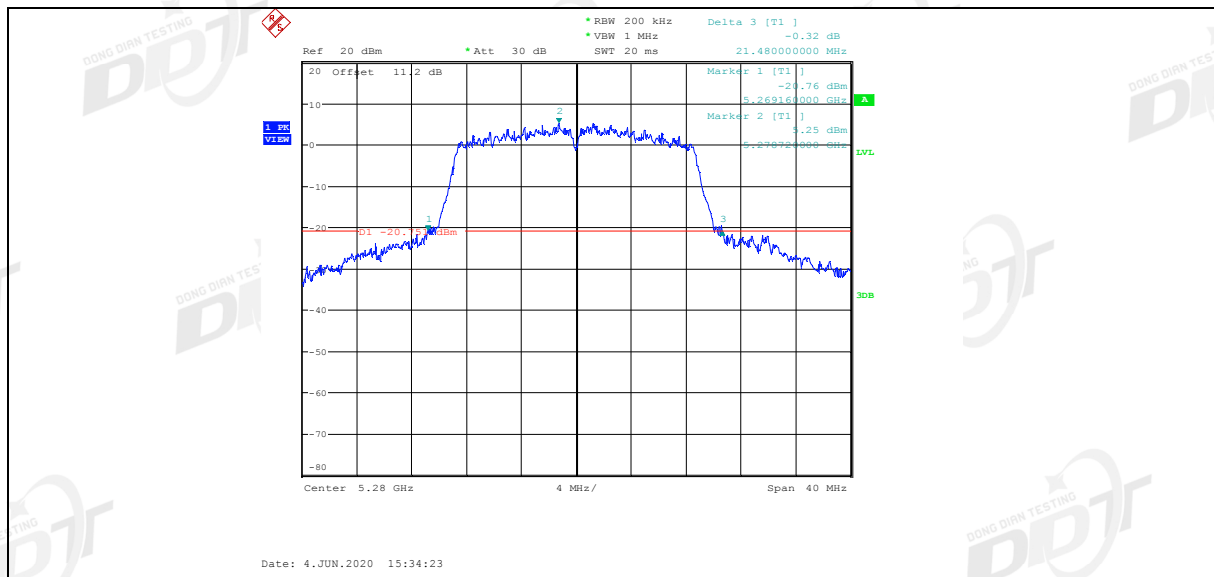
11AC20SISO_Ant1_5260



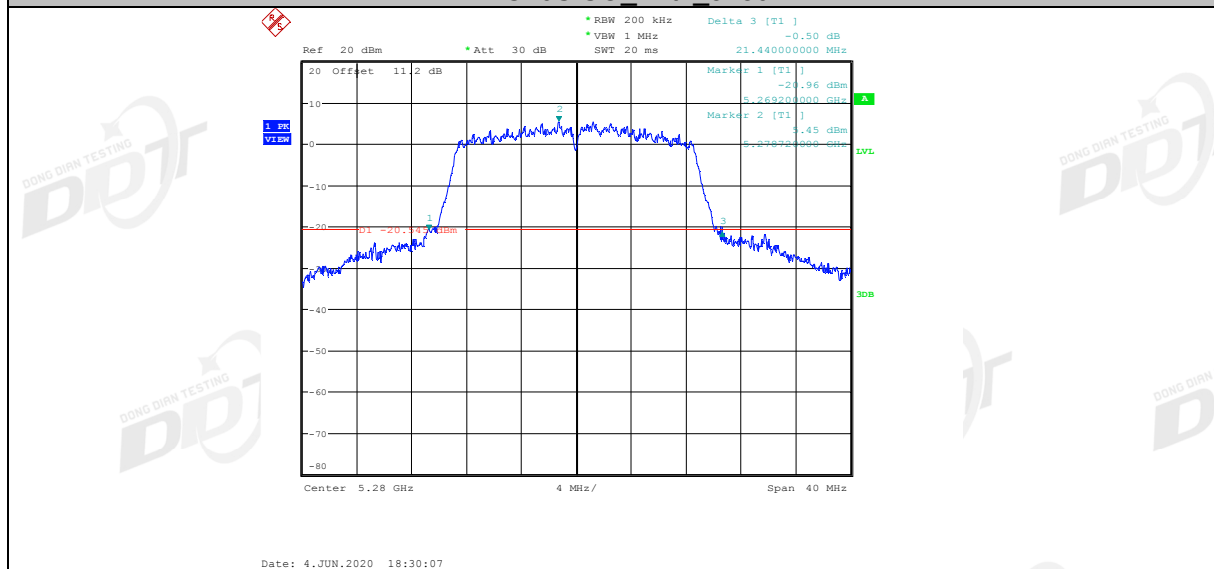
11AC20SISO_Ant2_5260



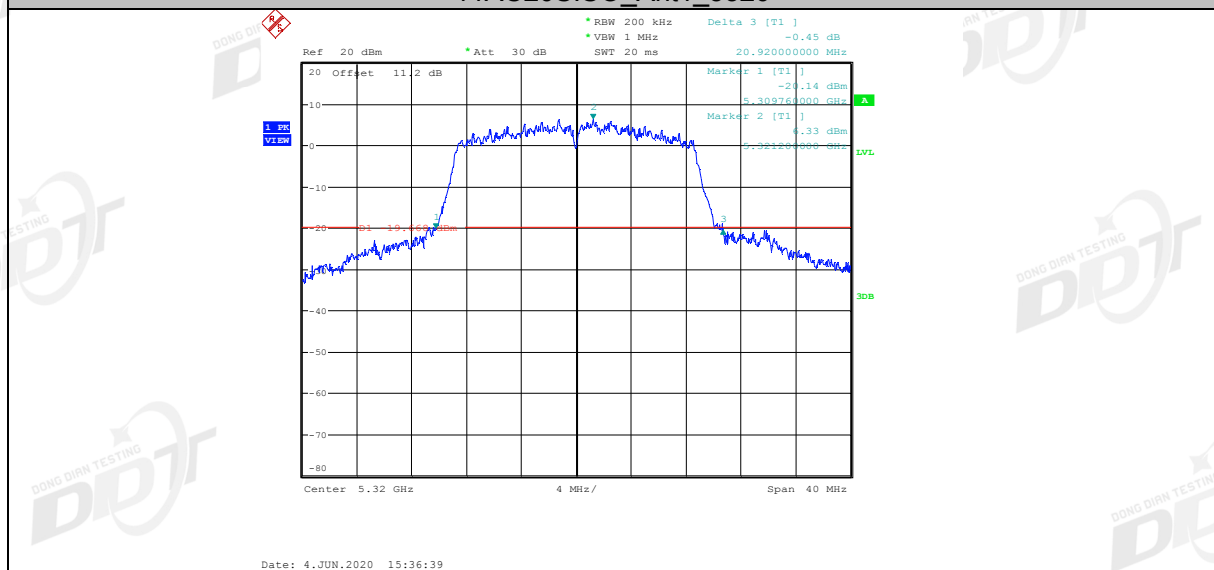
11AC20SISO_Ant1_5280



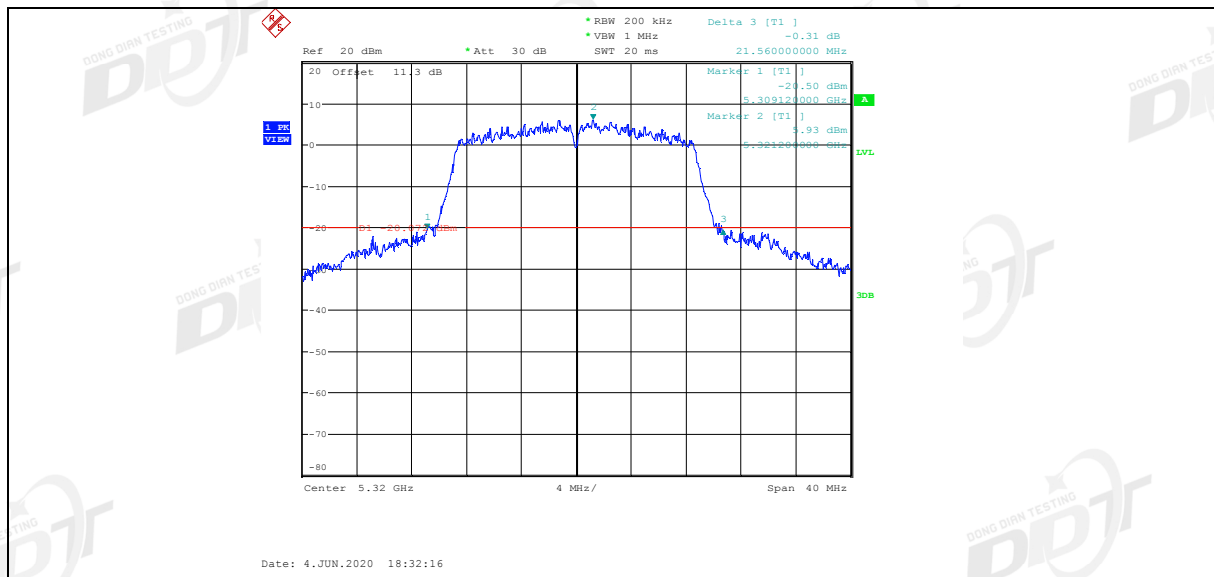
11AC20SISO_Ant2_5280



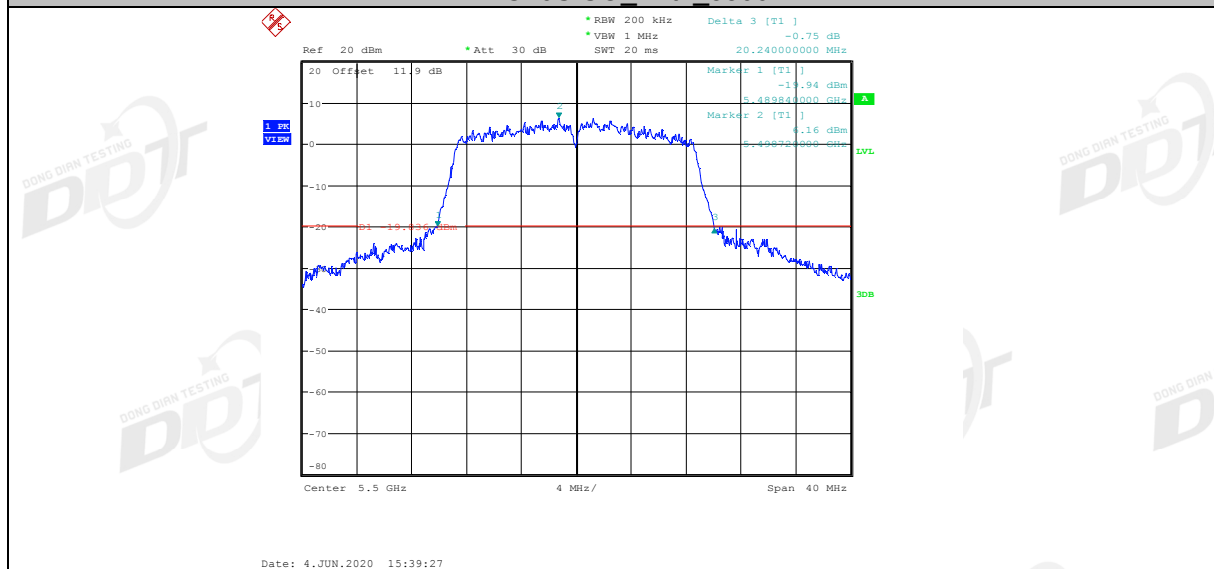
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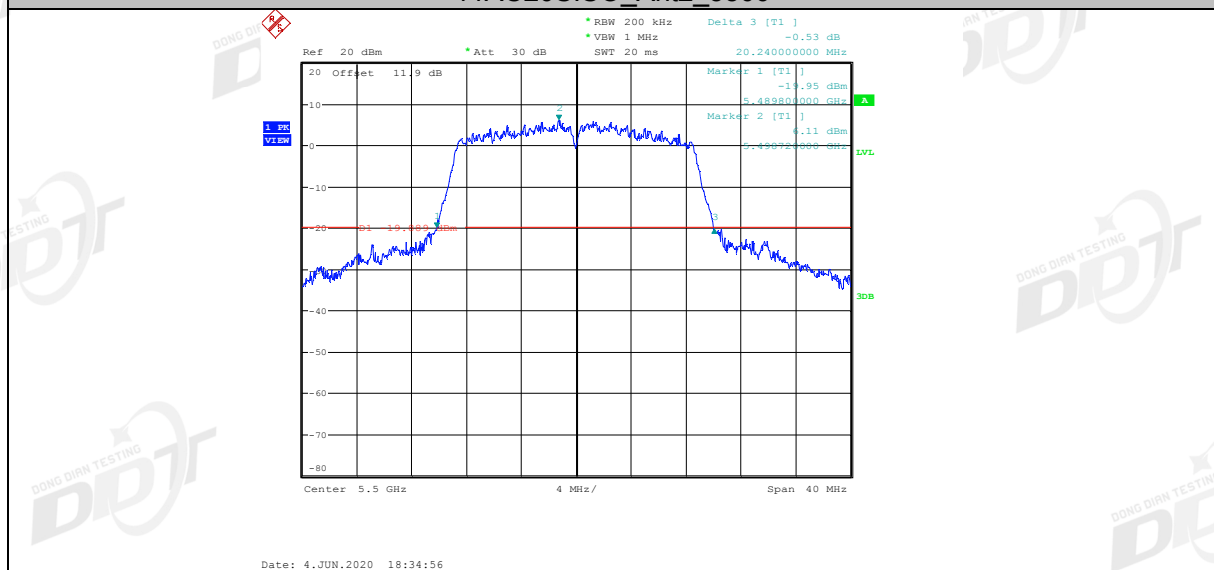
11AC20SISO_Ant2_5320



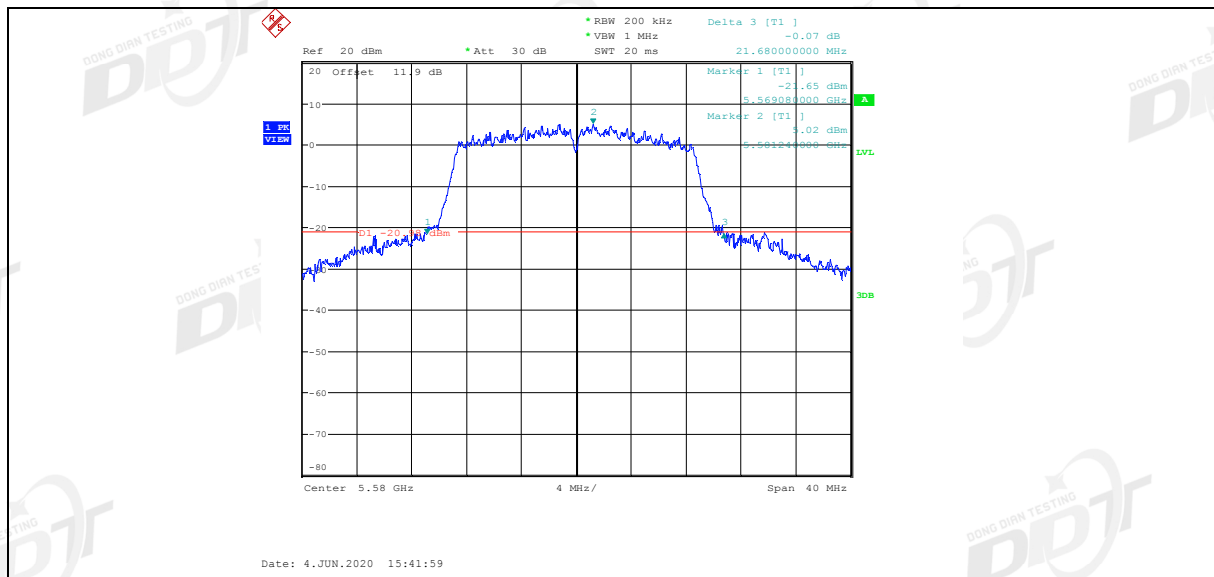
11AC20SISO_Ant1_5500



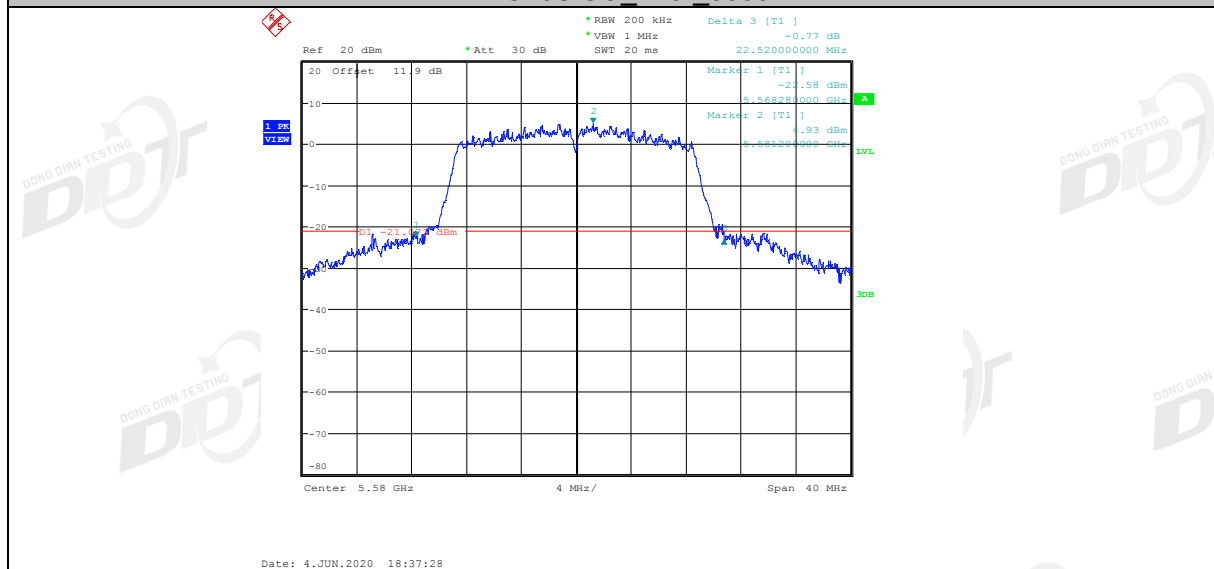
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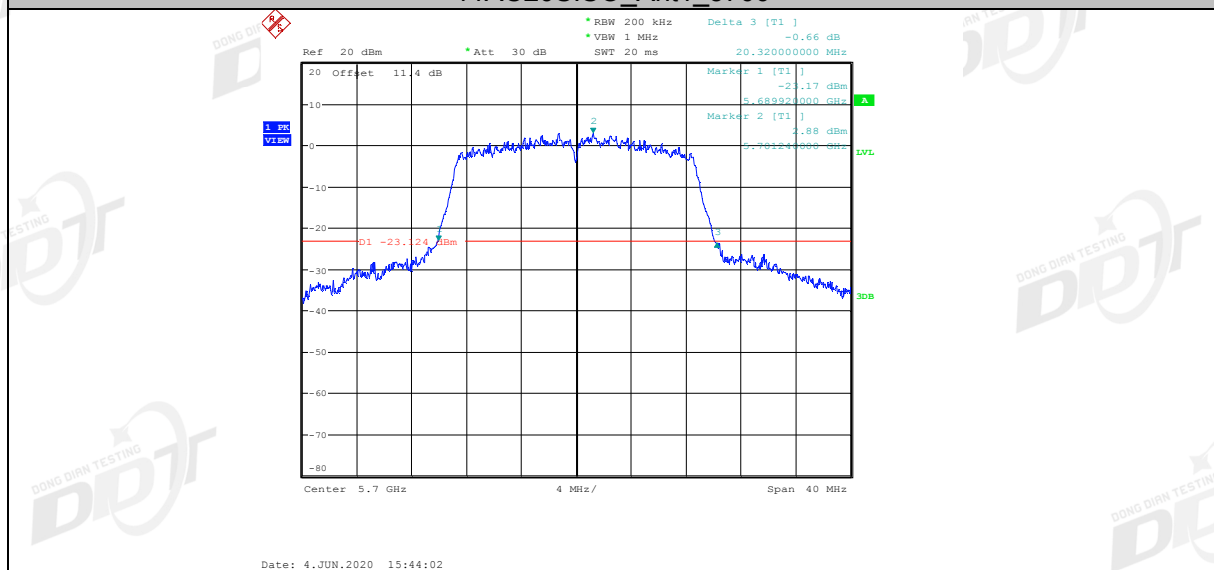
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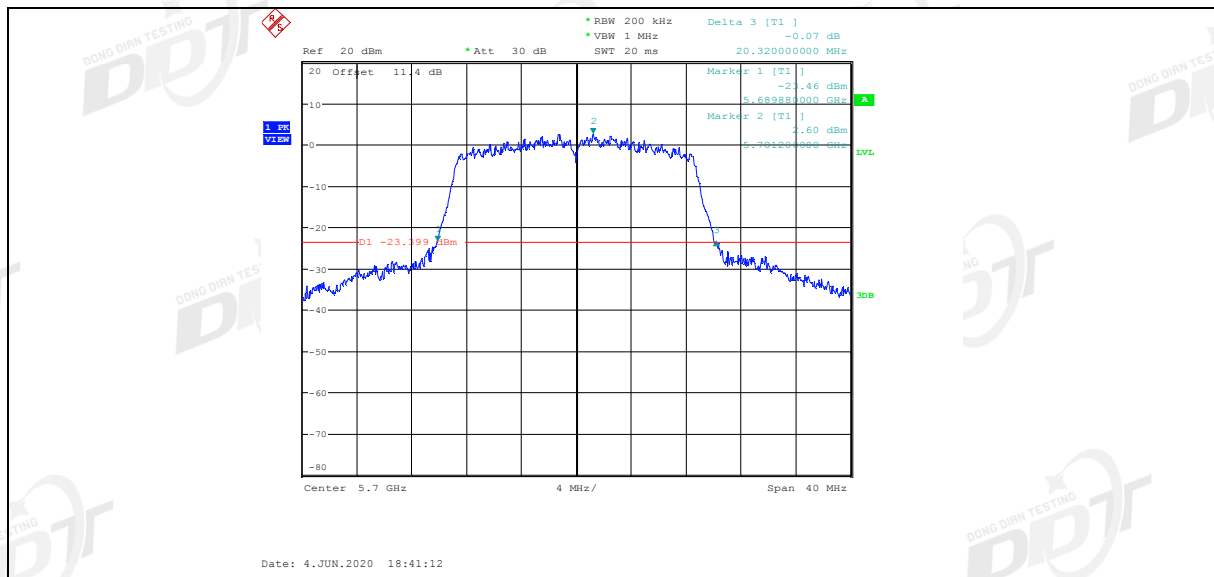
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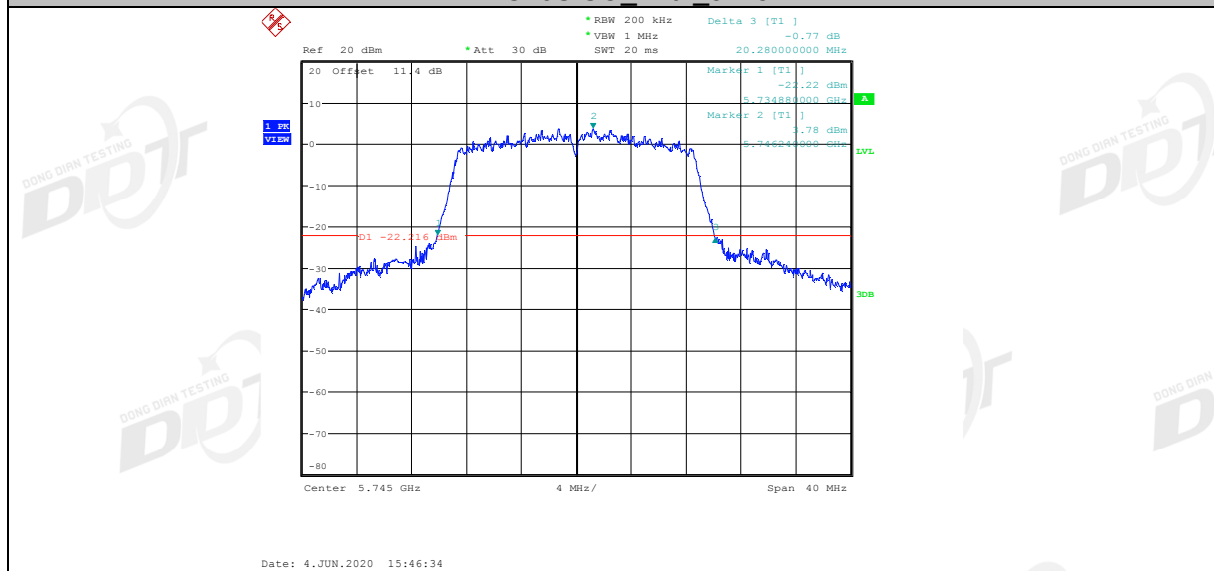
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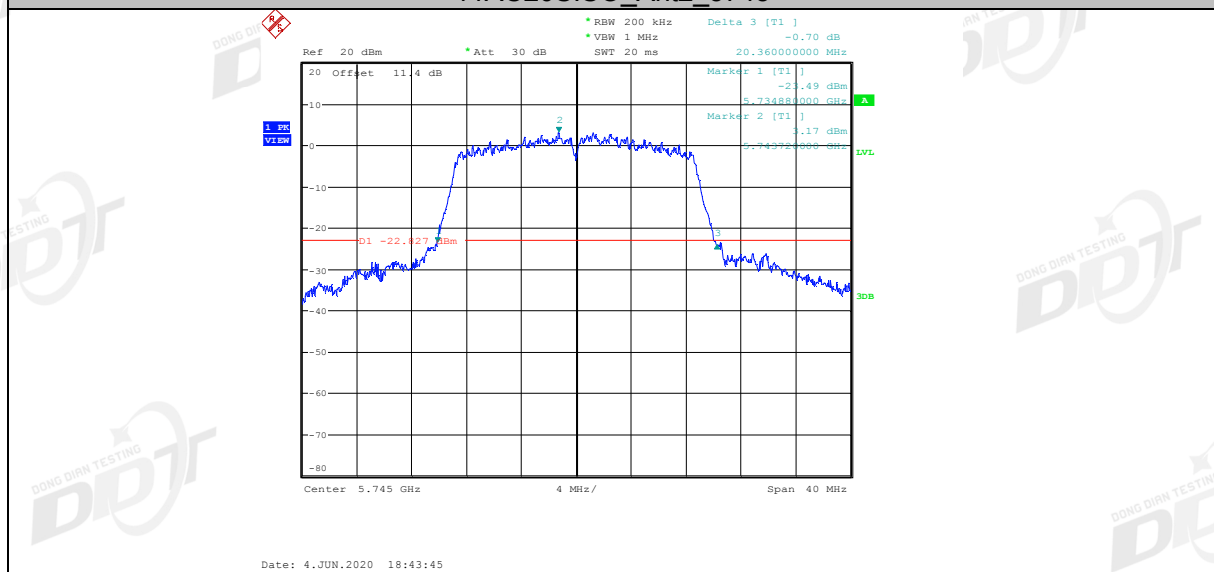
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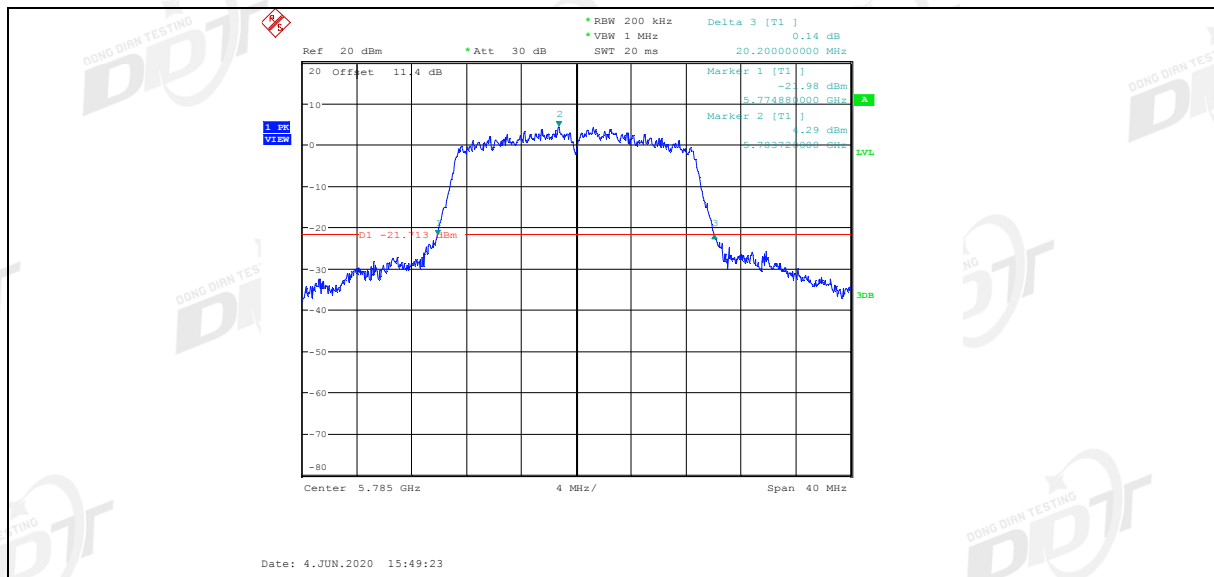
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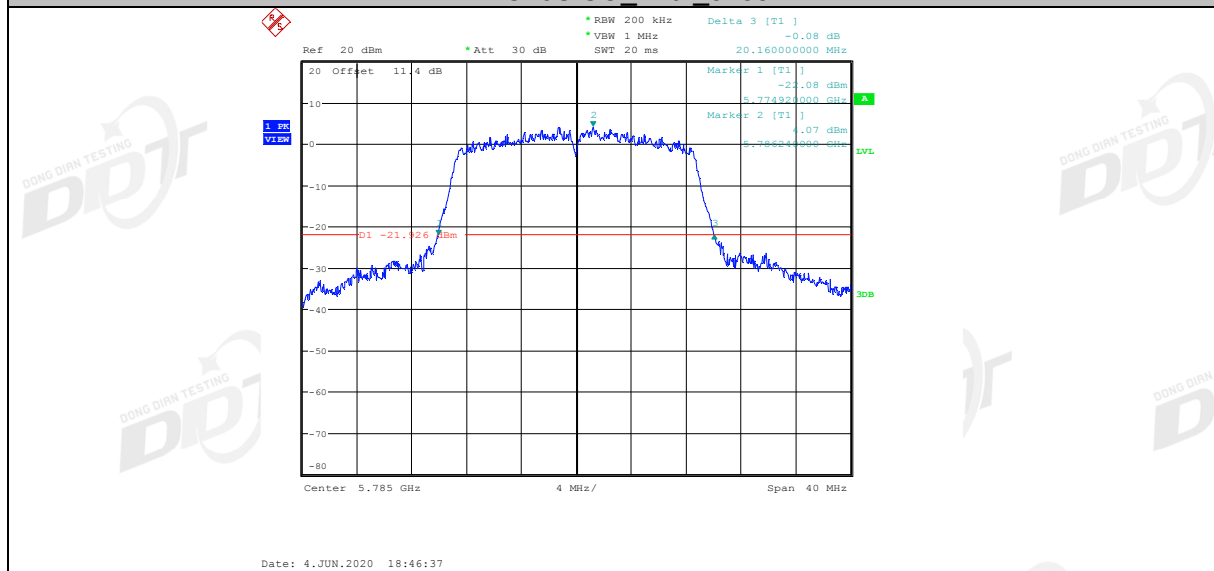
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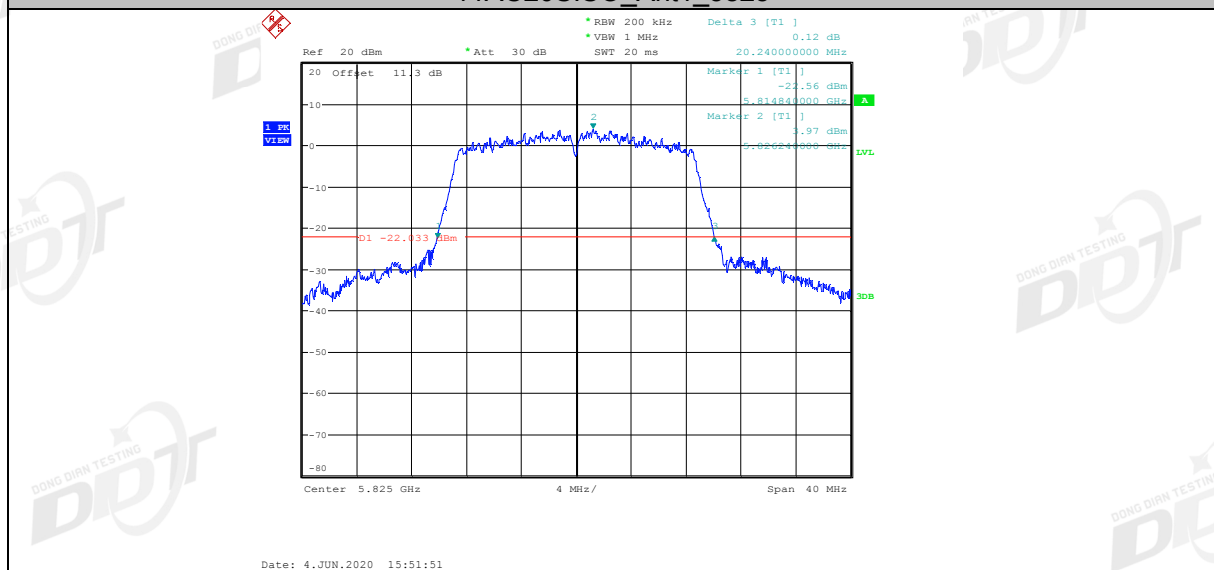
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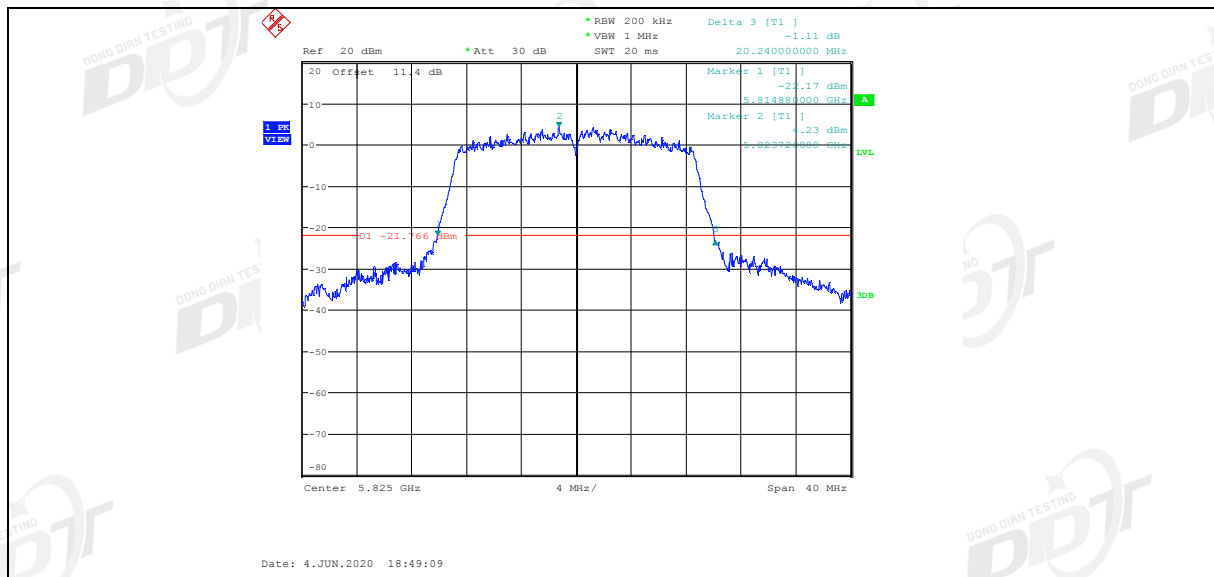
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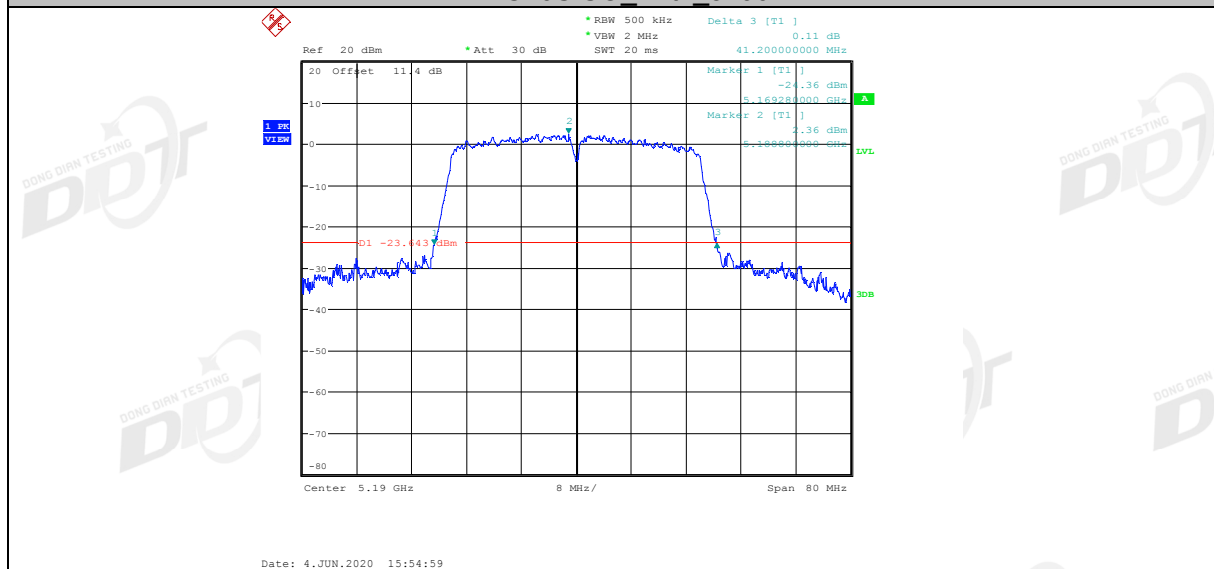
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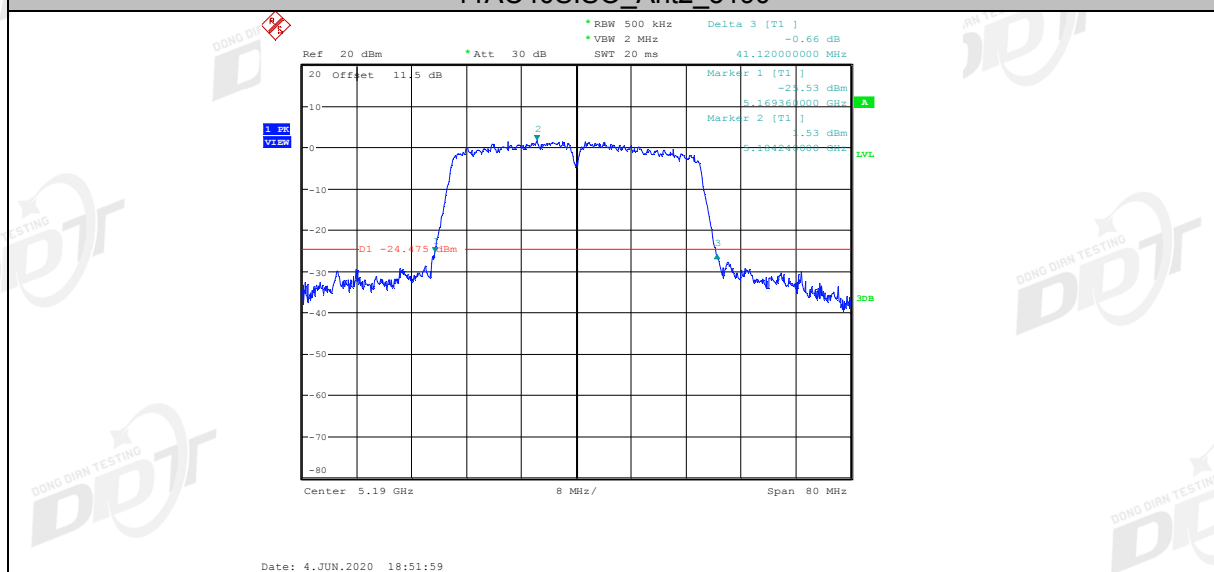
11AC20SISO_Ant2_5825



11AC40SISO_Ant1_5190



11AC40SISO_Ant2_5190



11AC40SISO_Ant1_5230



Ref 20 dBm *Att 30 dB Delta 3 [T1]
 *RBW 500 kHz
 *VBW 2 MHz
 SWT 20 ms 41.120000000 MHz

20 Offset 11.2 dB

1 PR
 VSW

Marker 1 [T1]
 -22.10 dBm
 5.203284000 GHz

Marker 2 [T1]
 -21.21 dBm
 5.224244000 GHz

D1 -21.21 dBm

Center 5.23 GHz 8 MHz/ Span 80 MHz

Date: 4.JUN.2020 18:54:18

* RBW 500 kHz Delta 3 [T1]
 * VBW 2 MHz 0.32 dB
 * Att 30 dB 48.08000000 MHz
 Ref 20 dBm
 SWT 20 ms

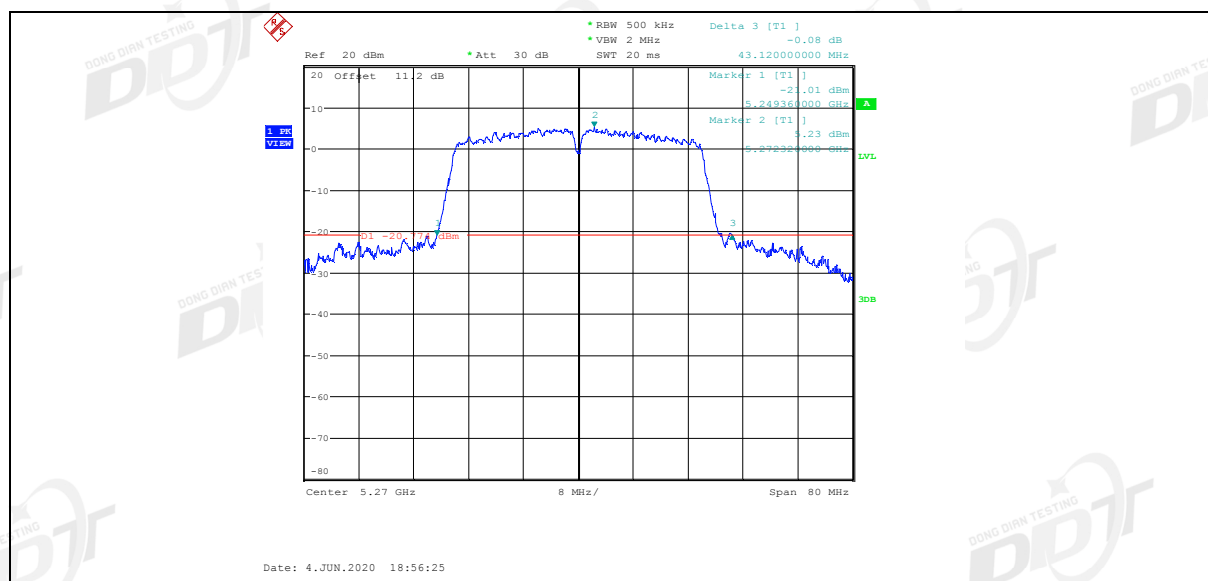
20 Offset 11.2 dB
 -10
 0
 -10
 -20
 -30
 -40
 -50
 -60
 -70
 -80

Marker 1 [T1]
 -21.78 dBm
 5.244480000 GHz
 Marker 2 [T1]
 -1.62 dBm
 5.274500000 GHz

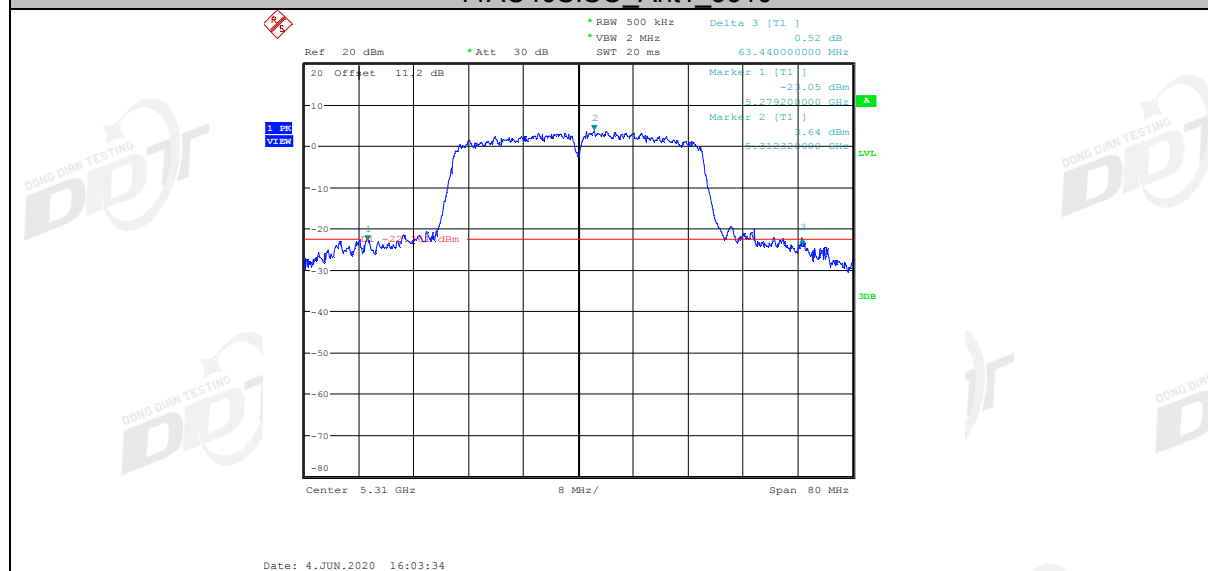
Center 5.27 GHz 8 MHz/
 Span 80 MHz

Date: 4.JUN.2020 15:59:48

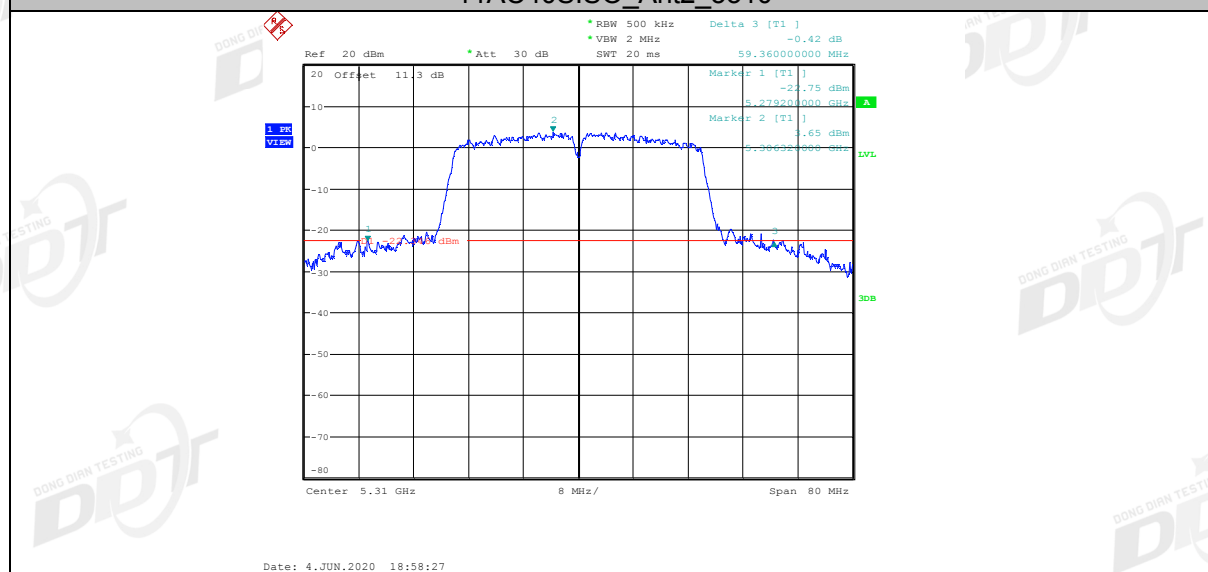
11AC40SISO Ant2 5270



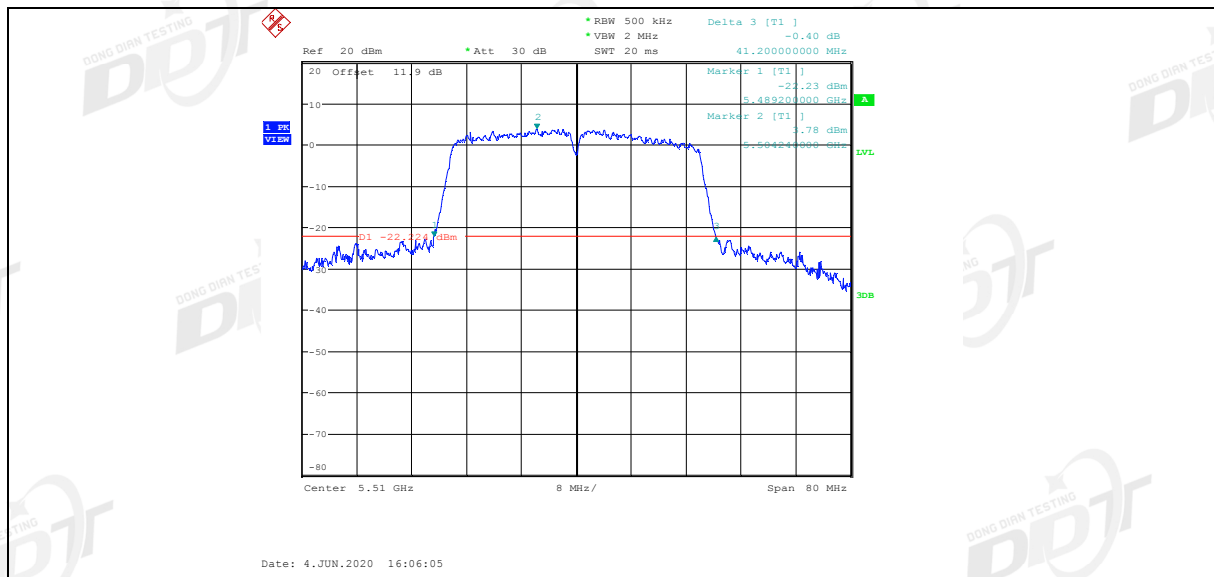
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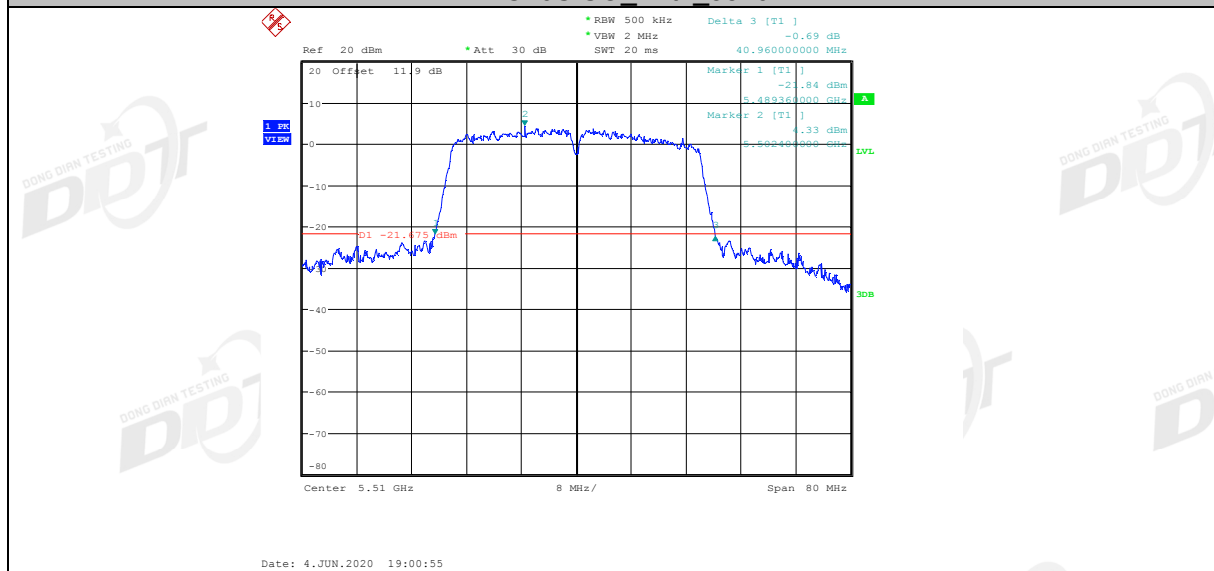
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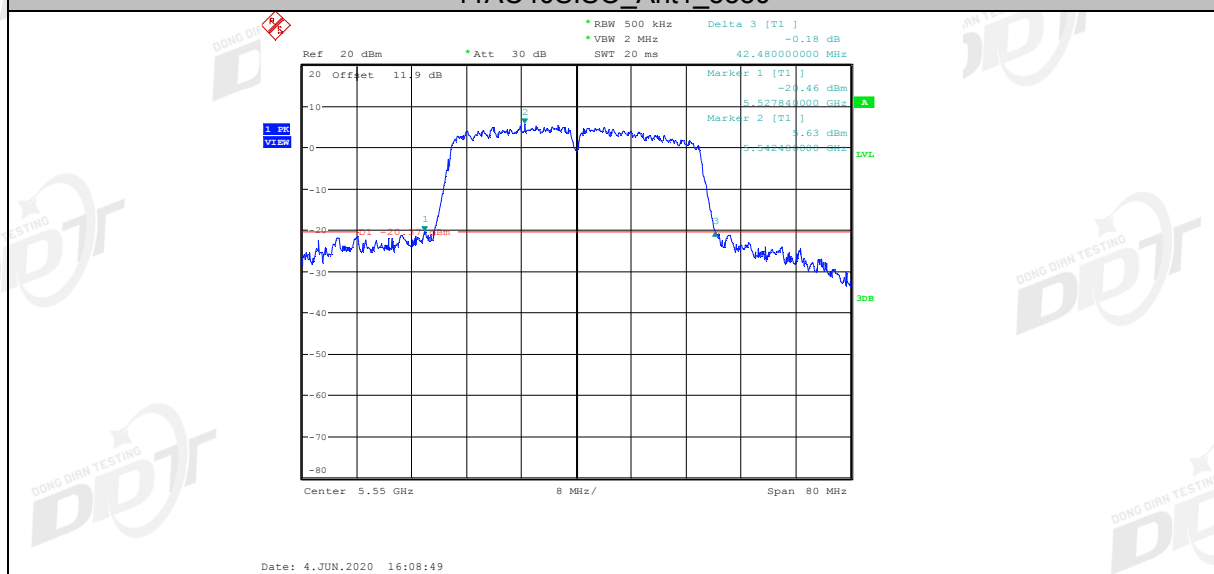
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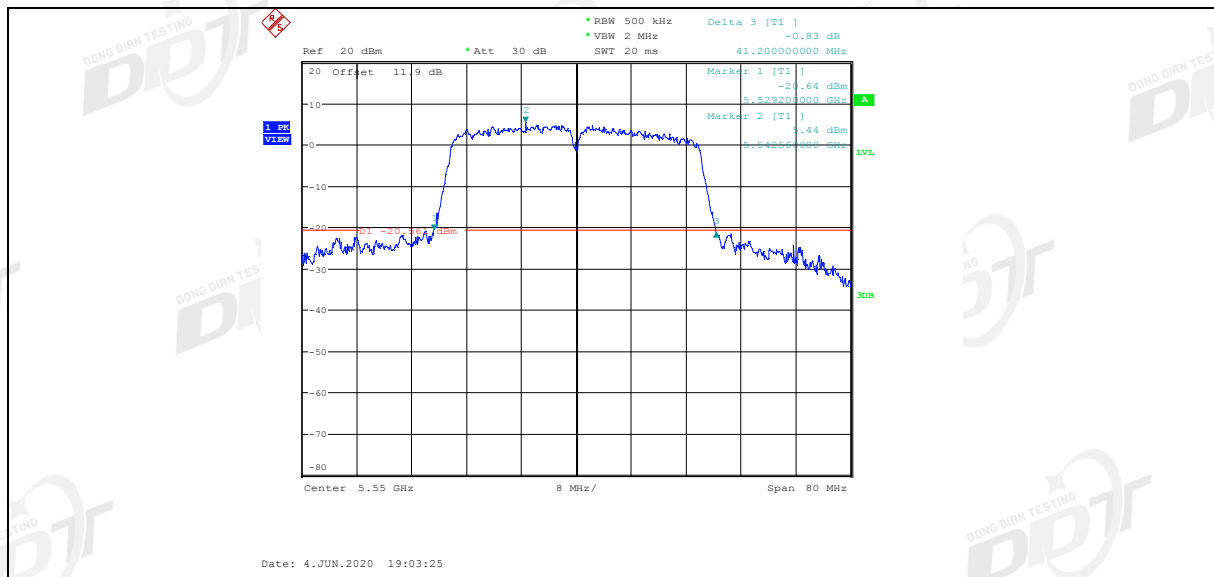
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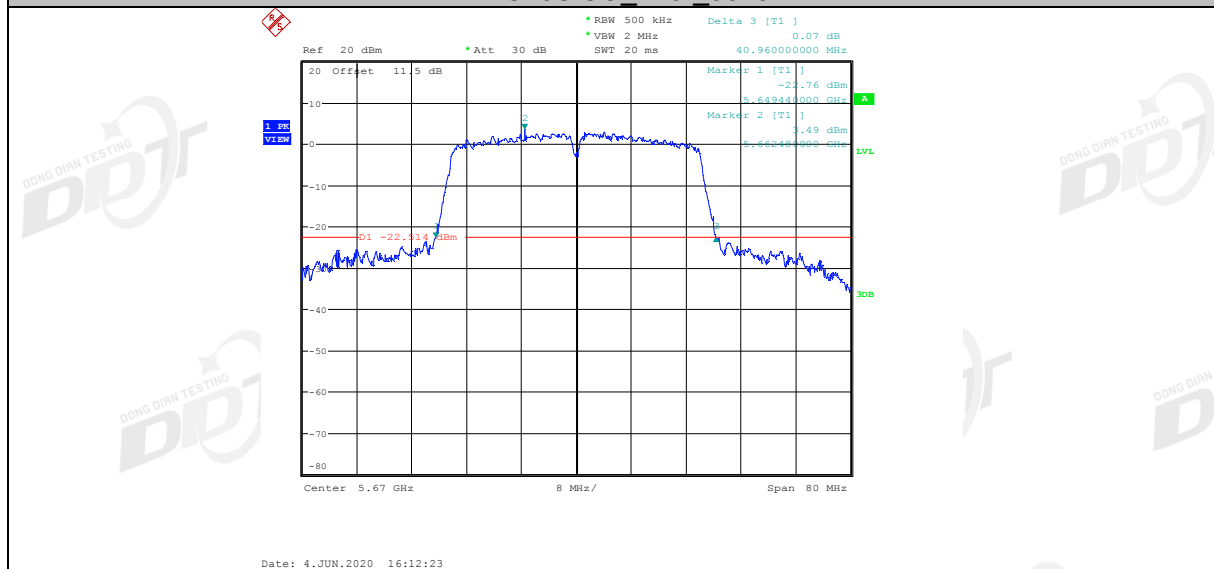
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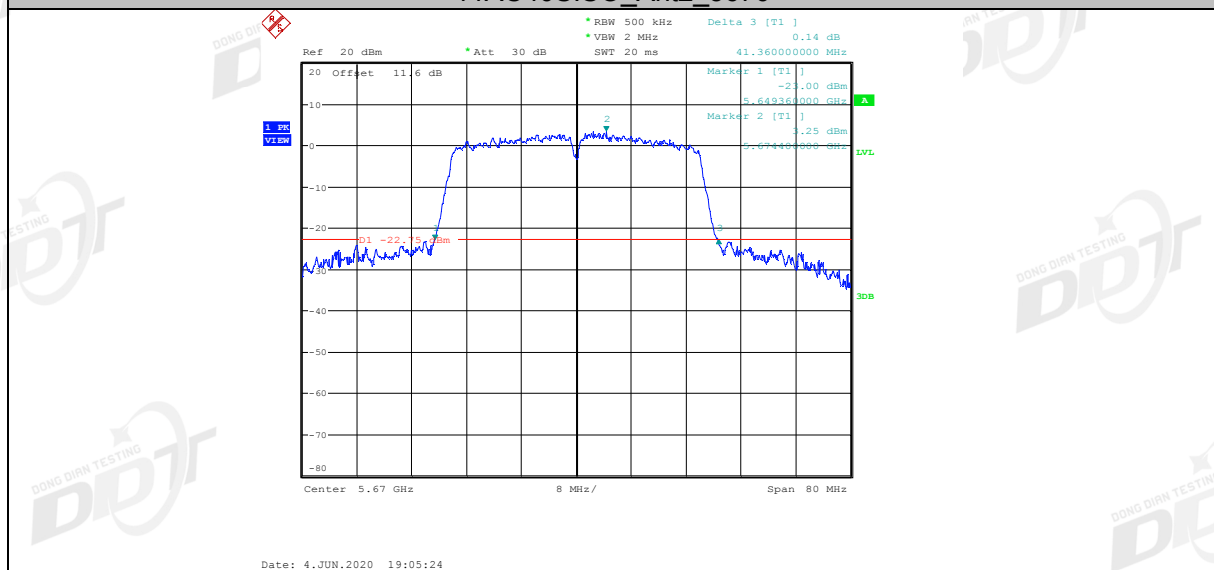
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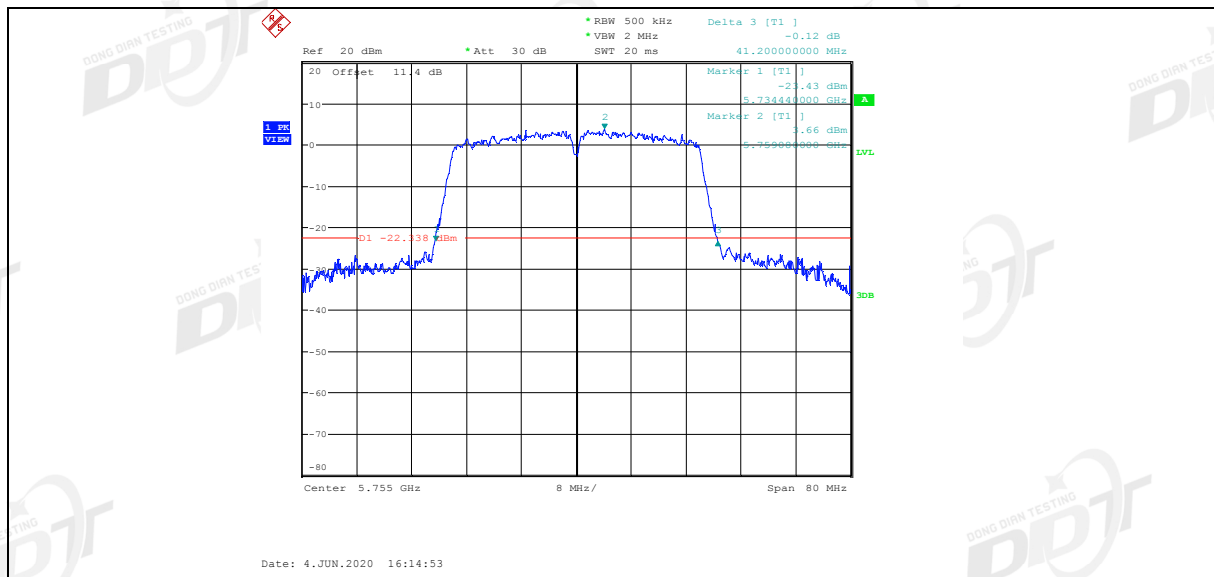
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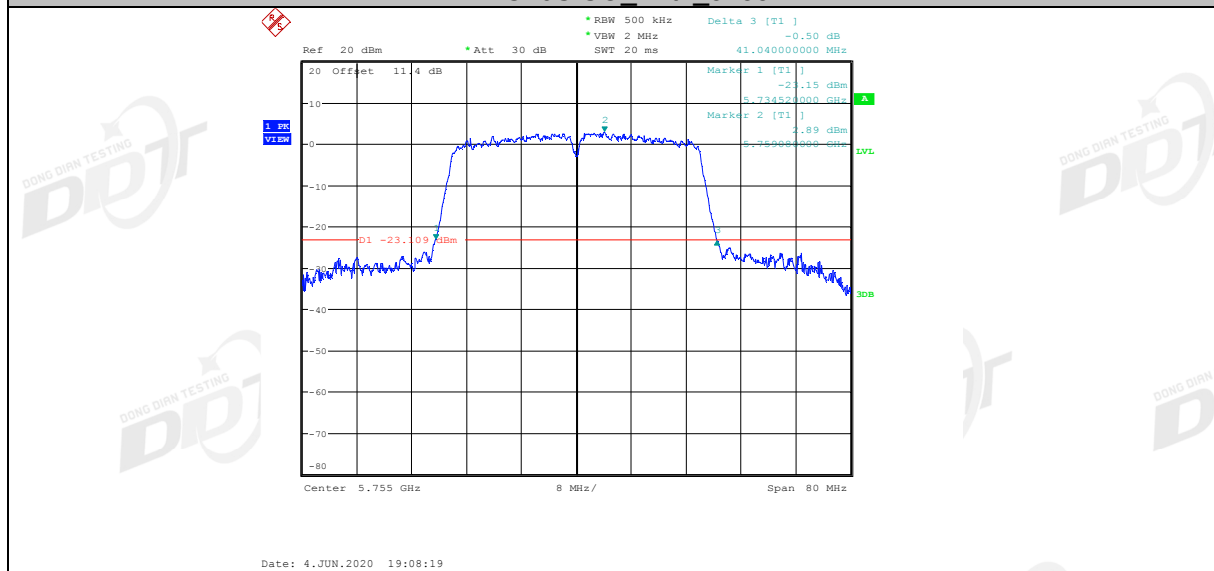
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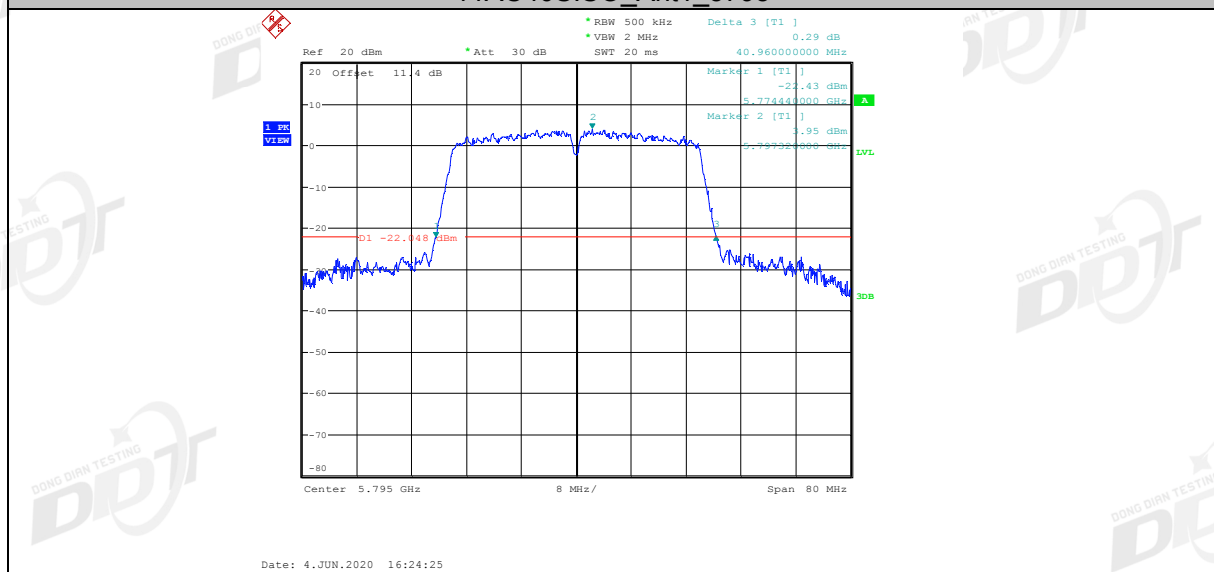
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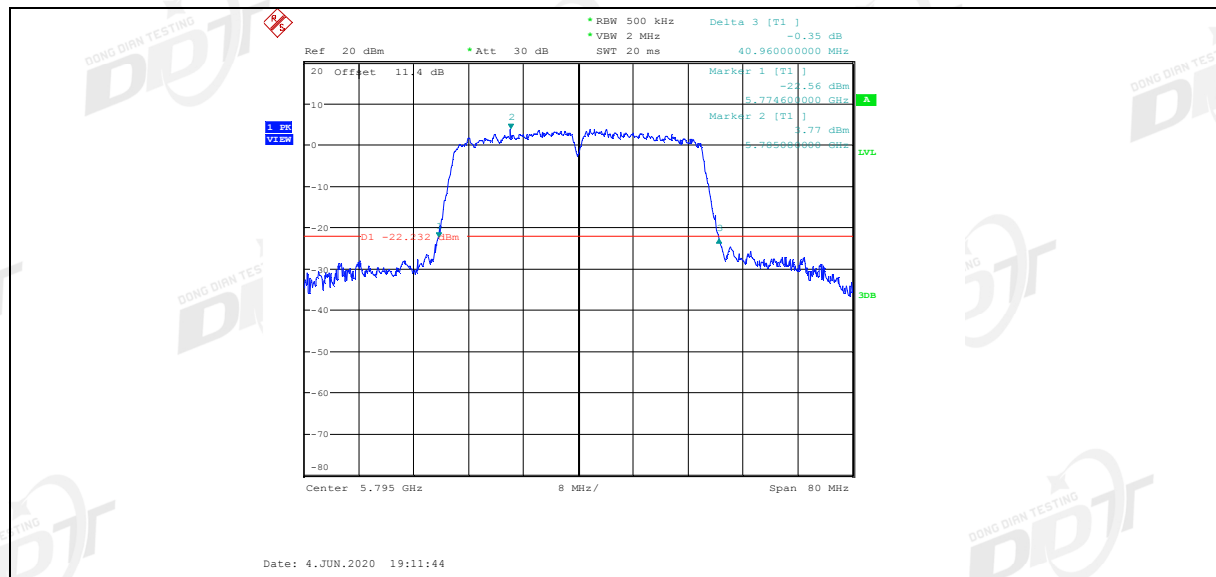
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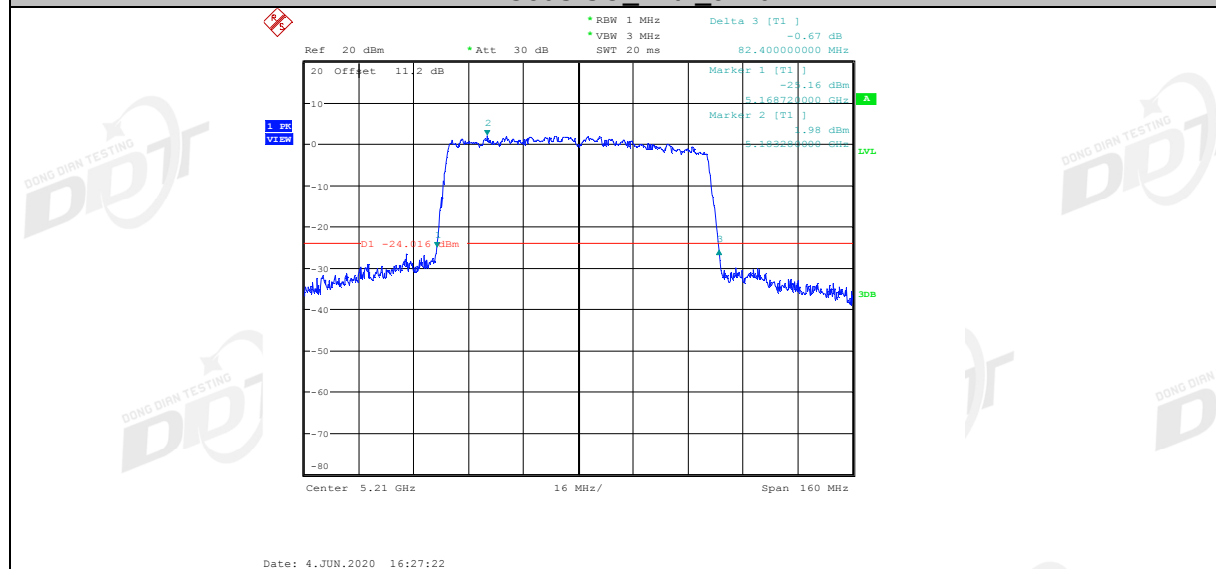
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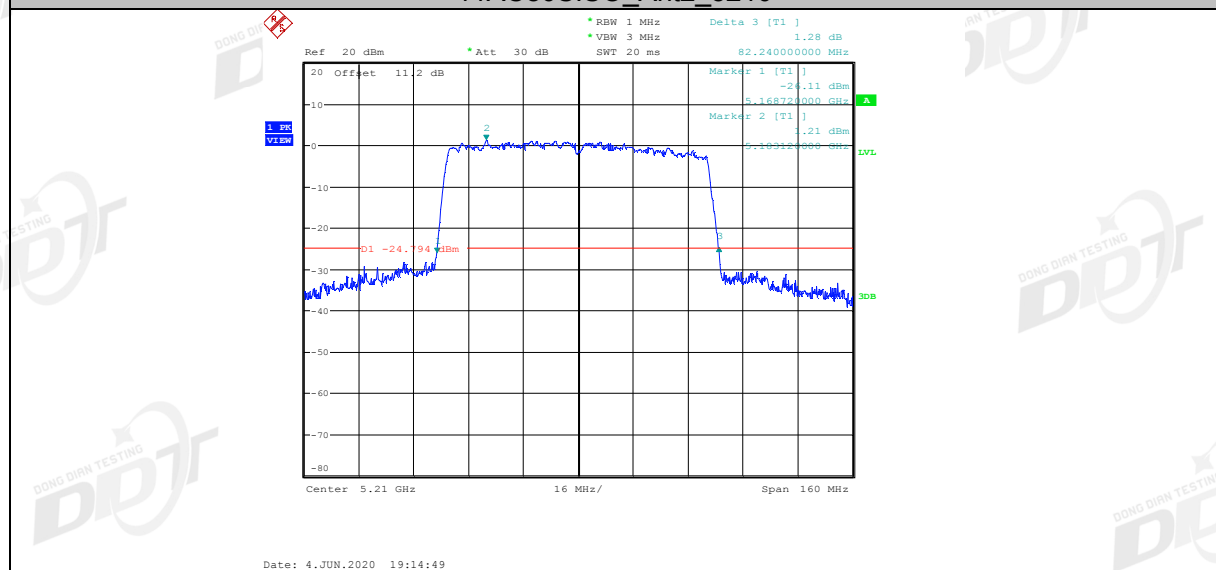
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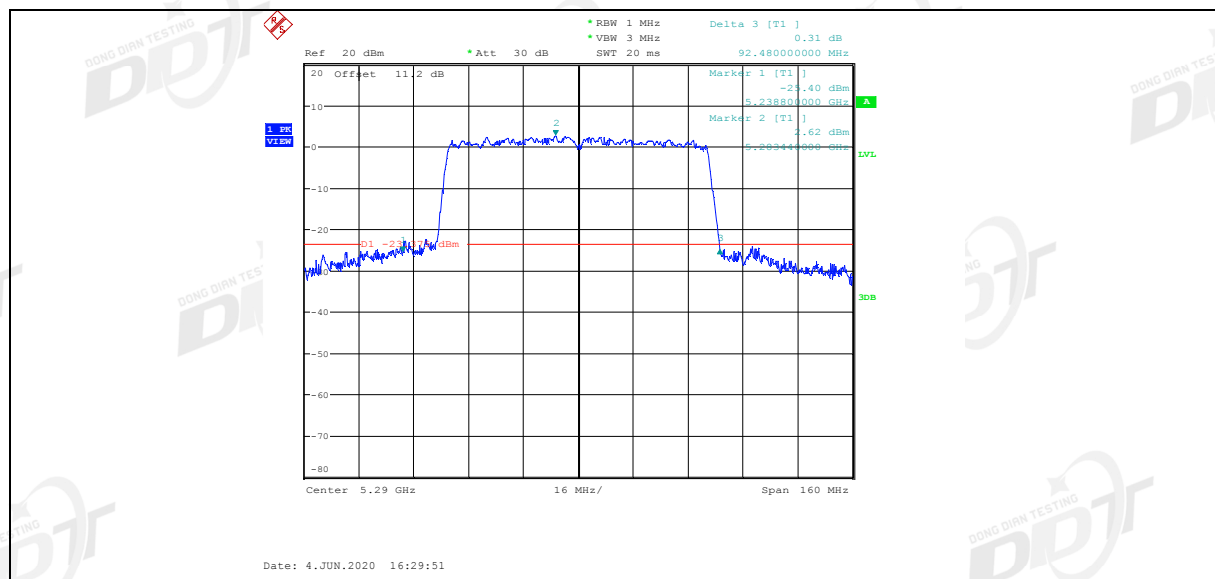
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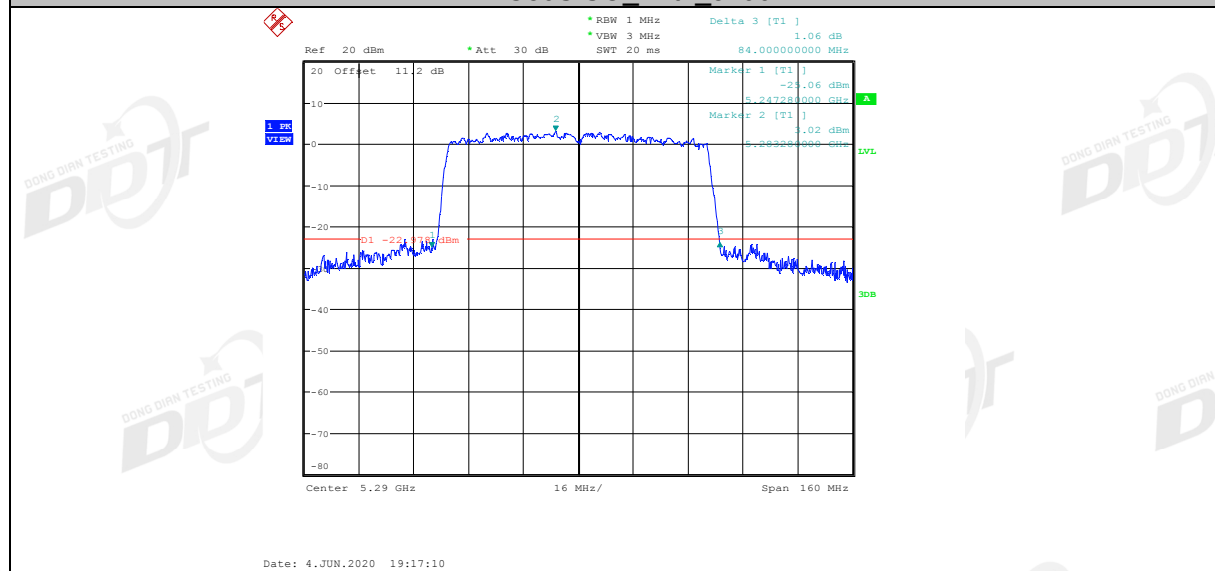
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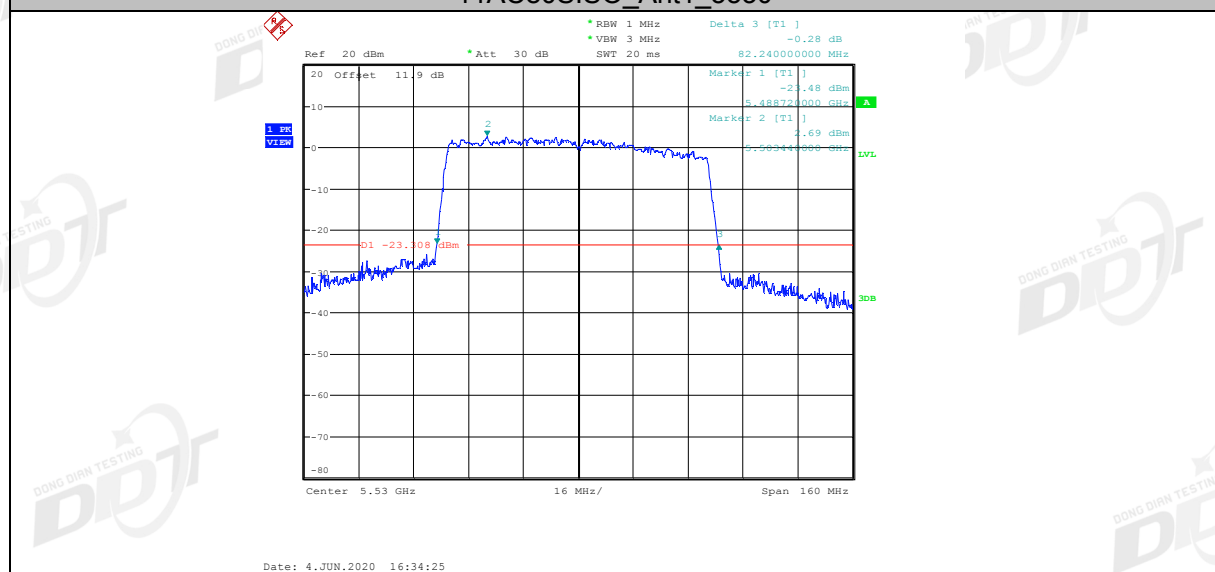
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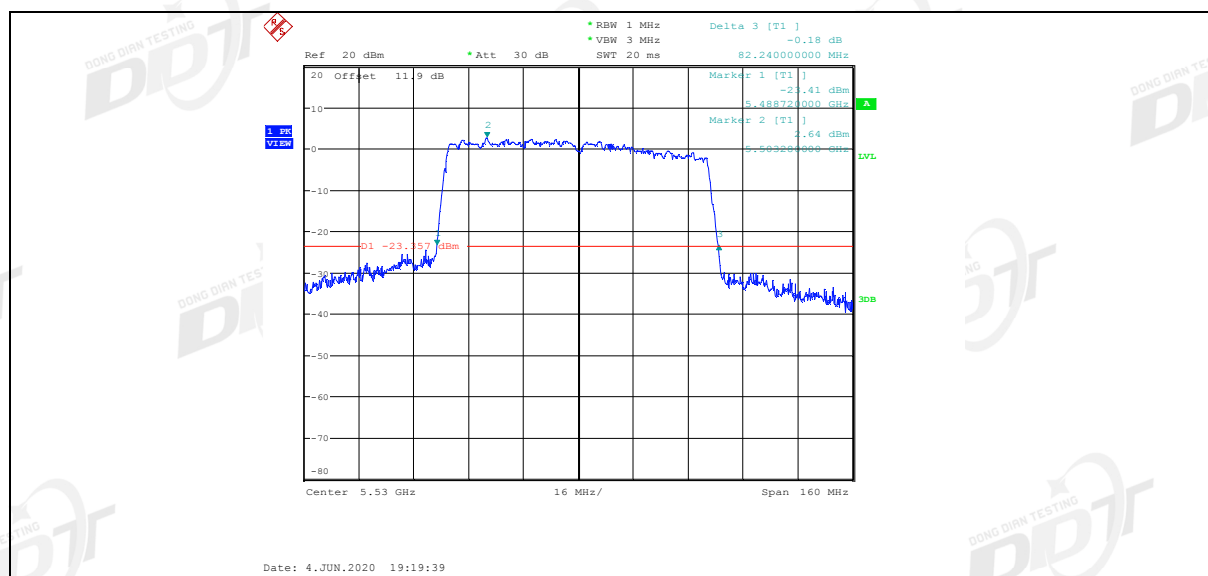
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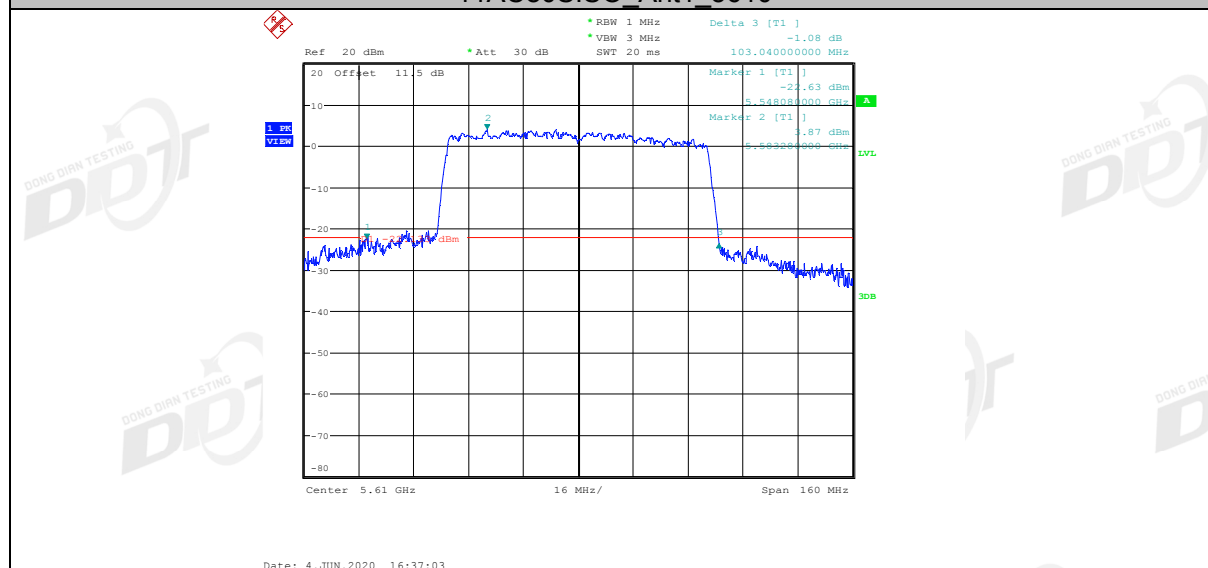
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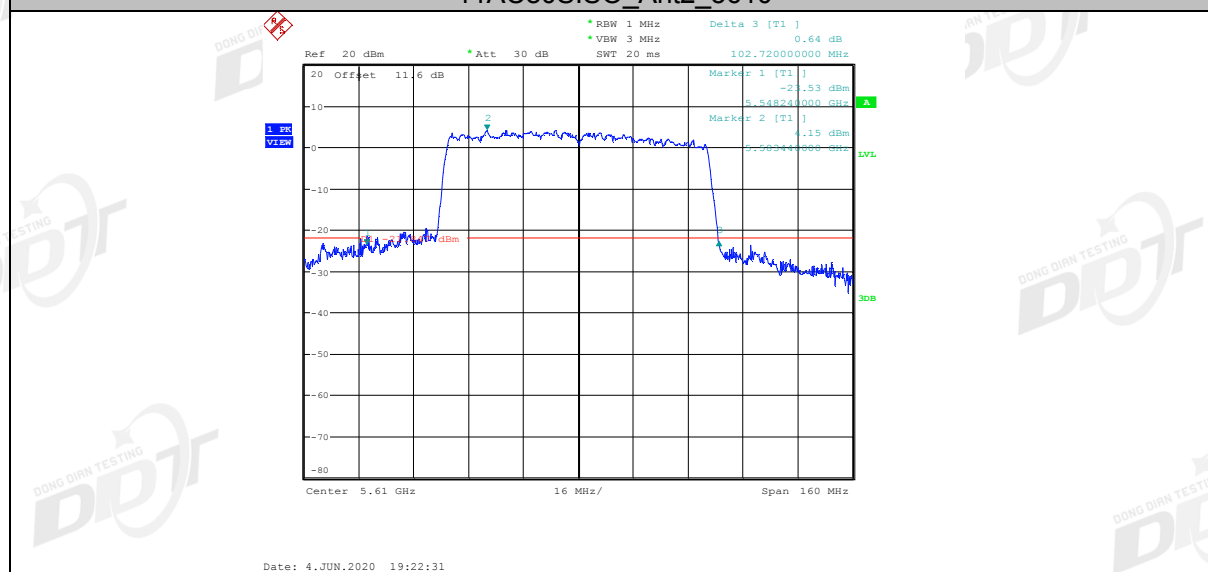
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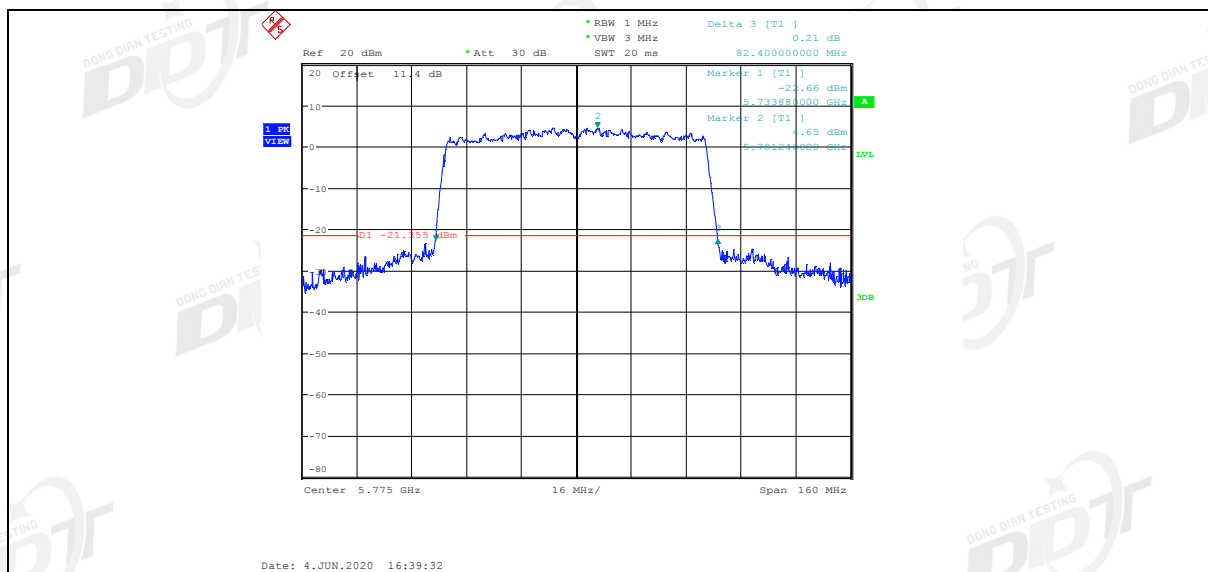
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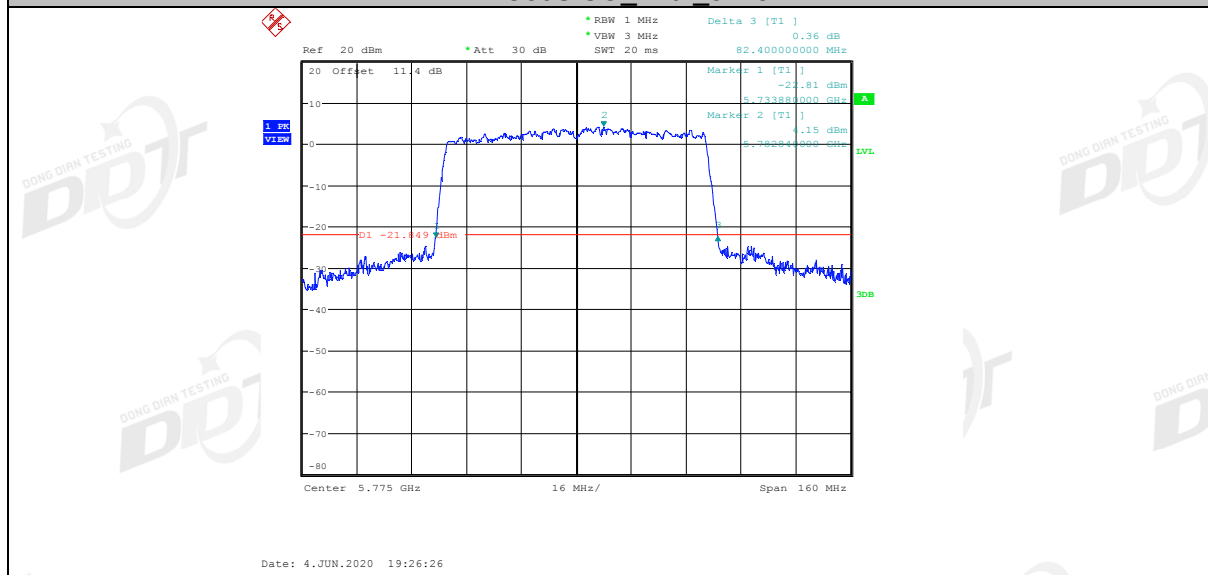
11AC80SISO_Ant2_5610



11AC80SISO_Ant1_5775



11AC80SISO_Ant2_5775



6 dB EBW:

