

FCC AND IC CERTIFICATION TEST REPORT

FOR

Applicant	:	Harman International Industries, Incorporated
Address	:	8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES
Equipment under Test	:	Streaming wireless adaptor
Model No.	:	ADAPT+
Trade Mark	:	Harman Kardon
FCC ID	:	APIHKADAPTP
IC	:	6132A-HKADAPTP
Manufacturer	:	Harman International Industries, Incorporated
Address	:	8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES

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

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REPORT

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TEST REPORT DECLARE

Applicant	:	Harman International Industries, Incorporated
Address	:	8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES
Equipment under Test	:	Streaming wireless adaptor
Model No	:	ADAPT+
Trade Mark	:	Harman Kardon
Manufacturer	:	Harman International Industries, Incorporated
Address	:	8500 Balboa Boulevard, Northridge, CA 91329, UNITED STATES

Test Standard Used: FCC Rules and Regulations Part 15 Subpart C, RSS-247 Issue 2 February 2017.

Test procedure used: ANSI C63.4:2014, 789033 D02 General UNII Test Procedures New Rules v01, RSS-Gen Issue 4, Nov. 2014

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&IC standards.

Report No:	DDT-R17Q0626-5E5		
Date of Receipt:	Jun. 26, 2017	Date of Test:	Jun. 26, 2017 ~ Sep. 05, 2017

Prepared By:

Damon Hu

Damon Hu/Engineer



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.

1. Summary of test results

The EUT have been tested according to the applicable standards as referenced below.		
Description of Test Item	Standard	Results
6/26db Bandwidth and 99% Bandwidth	FCC 15.407 (e) RSS-247 Clause 6.2	PASS
Maximum Conducted Output Power	FCC 15.407 (a) RSS-247 Clause 6.2	PASS
Power Spectral Density	FCC 15.407 (a) RSS-247 Clause 6.2	PASS
Frequency Stability Measurement	FCC 15.407 (g)	PASS
Emissions in restricted frequency bands	FCC 15.407 (a) FCC 15.209 FCC 15.205 RSS-247 Clause 6.2 RSS-GEN Clause 8.9	PASS
Band Edge Compliance	FCC 15.407 (a) FCC 15.209 FCC 15.205 RSS-247 Clause 6.2 RSS-GEN Clause 8.9	PASS
Power Line Conducted Emission	FCC 15.207 RSS-GEN Clause 8.8	PASS
Antenna requirement	FCC 15.203 RSS-GEN Clause 8.3	PASS
Dynamic Frequency Selection	FCC 15.407 (h) RSS-247 Clause 6.3	PASS

2. General test information

2.1. Description of EUT

EUT* Name	: Streaming wireless adaptor
Model Number	: ADAPT+
EUT function description	: Please reference user manual of this device
Power supply	: DC 5V from external AC ADAPTER
Radio Technology	: IEEE802.11n/a/ac
FCC Operation frequency	IEEE 802.11n HT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz IEEE 802.11n HT40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5670MHz, 5755MHz-5755MHz IEEE 802.11a: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz IEEE 802.11ac HT20: 5180MHz-5240MHz, 5260MHz-5320MHz, 5500MHz-5700MHz, 5745MHz-5825MHz IEEE 802.11ac T40: 5190MHz-5230MHz, 5270MHz-5310MHz, 5510MHz-5670MHz, 5755MHz-5755MHz IEEE 802.11ac HT80: 5210MHz, 5290MHz, 5530MHz, 5775MHz
Modulation	IEEE 802.11n HT20, HT40: OFDM (64QAM, 16QAM, QPSK,BPSK) IEEE 802.11a: 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: up to 150 Mbps, HT40: up to 300Mbps IEEE 802.11ac VHT20: up to 150 Mbps, VHT40: up to 300 Mbps VHT80: up to 886.7 Mbps
Antenna Type	Integrated antenna 1: 5G band maximum PK gain 2.81dBi Integrated antenna 2: 5G band maximum PK gain 5.41dBi
Sample Type	: Series production

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

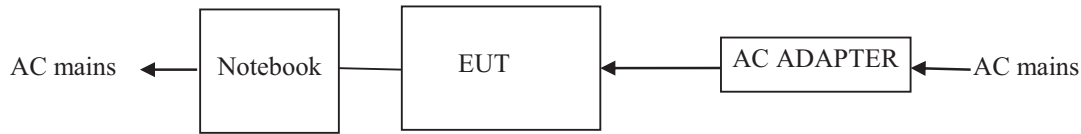
2.2. Accessories of EUT

Description of Accessories	Manufacturer	Model number	Serial No.	Other
USB cable	Harman	N/A	N/A	Length: 1.5m
Audio cable	Harman	N/A	N/A	Length: 0.8m
AC Adapter	Group Intellect Power Technology Limited	F5V-2.3C-1U	N/A	Input: AC 100-240V -50/60Hz, 0.5A; Output: DC 5V, 2.3A

2.3. Assistant equipment used for test

Description of Assistant equipment	Manufacturer	Model number or Type	EMC Compliance	SN:
Notebook	DELL	Latitude D610	FCC DOC	00045-534-136-300
Network Cable	N/A	N/A	N/A	Length: 1.5m

2.4. Block diagram of EUT configuration for test



EUT was connected to control to provided by manufacturer which has a standard LAN port connector to connect to Notebook, and the Notebook will run a special test software “The super termina” provided by manufacturer to control EUT work in Continuous TX mode (>98% duty cycle), and select test channel, wireless mode and data rate.

Tested mode, channel, and data rate information				
Mode	Setting Tx Power	data rate (Mbps) (see Note)	Channel	Frequency (MHz)
IEEE 802.11a	60	54	Low :CH36	5180
	60	54	Middle: CH40	5200
	54	54	High: CH48	5240
	54	54	Low :CH52	5260
	60	54	Middle: CH56	5280
	60	54	High: CH64	5320
	58	54	Low :CH100	5500
	60	54	Middle: CH116	5580
	58	54	High: CH140	5700
	56	54	Low :CH149	5745
	60	54	Middle: CH157	5785
	58	54	High: CH165	5825
IEEE 802.11n HT20	60	MCS 7	Low :CH36	5180
	60	MCS 7	Middle: CH40	5200
	54	MCS 7	High: CH48	5240
	54	MCS 7	Low :CH52	5260
	60	MCS 7	Middle: CH56	5280
	60	MCS 7	High: CH64	5320
	58	MCS 7	Low :CH100	5500
	60	MCS 7	Middle: CH116	5580
	58	MCS 7	High: CH140	5700
	56	MCS 7	Low :CH149	5745
	60	MCS 7	Middle: CH157	5785
	58	MCS 7	High: CH165	5825
IEEE 802.11n HT40	56	MCS 7	Low :CH36	5190
	52	MCS 7	Middle: CH44	5230
	50	MCS 7	High: CH52	5270
	56	MCS 7	Low :CH60	5310
	52	MCS 7	Middle: CH100	5510
	56	MCS 7	High: CH108	5550
	56	MCS 7	Low :CH132	5670
	52	MCS 7	Middle: CH149	5755
	56	MCS 7	High: CH157	5795

IEEE 802.11ac HT20	60	MCS 7	Low :CH36	5180
	60	MCS 7	Middle: CH40	5200
	54	MCS 7	High: CH48	5240
	54	MCS 7	Low :CH52	5260
	60	MCS 7	Middle: CH56	5280
	60	MCS 7	High: CH64	5320
	58	MCS 7	Low :CH100	5500
	60	MCS 7	Middle: CH116	5580
	58	MCS 7	High: CH140	5700
	56	MCS 7	Low :CH149	5745
	60	MCS 7	Middle: CH157	5785
	58	MCS 7	High: CH165	5825
IEEE 802.11ac HT40	56	MCS 8	Low :CH36	5190
	52	MCS 8	Middle: CH44	5230
	50	MCS 8	High: CH52	5270
	56	MCS 8	Low :CH60	5310
	52	MCS 8	Middle: CH100	5510
	56	MCS 8	High: CH108	5550
	56	MCS 8	Low :CH132	5670
	52	MCS 8	Middle: CH149	5755
	56	MCS 8	High: CH159	5795
IEEE 802.11ac HT80	50	MCS 9	CH36	5210
	50	MCS 9	CH60	5290
	54	MCS 9	CH108	5530
	52	MCS 9	CH149	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℃
Humidity range:	40-75%
Pressure range:	86-106kPa

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: +86-0769-89201699 <http://www.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

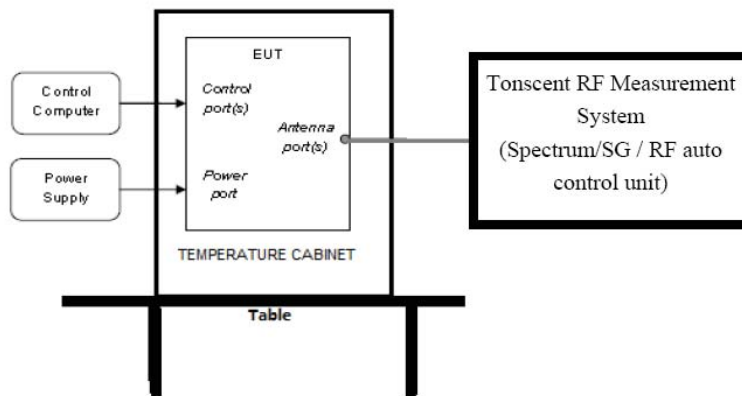
Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power(Conducted)(Spectrum analyzer)	0.86dB(10 MHz $\leq$ f < 3.6GHz);
	1.38dB(3.6GHz $\leq$ f < 8GHz)
Peak Output Power(Conducted)(Power Sensor)	0.74dB
Power Spectral Density	0.74dB(10 MHz $\leq$ f < 3.6GHz);
	1.38dB(3.6GHz $\leq$ f < 8GHz)
Frequencies Stability	6.7 x 10-8 (Antenna couple method)
	5.5 x 10-8 (Conducted method)
Conducted spurious emissions	0.86dB(10 MHz $\leq$ f < 3.6GHz);
	1.40dB(3.6GHz $\leq$ f < 8GHz)
	1.66dB(8GHz $\leq$ f < 22GHz)
Uncertainty for radio frequency (RBW<20KHz)	3×10-8
Temperature	0.4°C
Humidity	2%
Uncertainty for Radiation Emission test (30MHz-1GHz)	4.70 dB (Antenna Polarize: V)
	4.84 dB (Antenna Polarize: H)
Uncertainty for Radiation Emission test (1GHz-26GHz)	4.10dB(1-6GHz)
	4.40dB (6GHz-18Gz)
	3.54dB (18GHz-26Gz)
Uncertainty for Power line conduction emission test	3.32dB (150KHz-30MHz)
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					
Spectrum analyzer	R&S	FSU26	1166.1660.26	Oct. 16, 2016	1 Year
Vector Signal Generator	Agilent	E8267D	MY52098743	Oct. 20, 2016	1 Year
Vector Signal Generator	Agilent	N5182A	MY48180737	Jun. 16, 2017	1 Year
Power Sensor	Agilent	U2021XA	MY55150010	Apr. 18, 2017	1 Year
Power Sensor	Agilent	U2021XA	MY55150011	Apr. 19, 2017	1 Year
DC Power Source	MATRIS	MPS-3005L-3	D813058W	Oct. 24, 2016	1 Year
Attenuator	Mini-Circuits	BW-S10W2	101109	Aug. 18, 2017	1 Year
RF Cable	Micable	C10-01-01-1	100309	Aug. 18, 2017	1 Year
Test Software	JS Tonscend	JS1120-2	Ver.2.5	N/A	N/A
USB Data acquisition	Agilent	U2531A	TW55043503	N/A	N/A
Auto control Unit	JS Tonscend	JS0806-2	158060010	N/A	N/A
Radiated Emission Test					
EMI Test Receiver	R&S	ESU8	100316	Oct. 16, 2016	1 Year
Spectrum analyzer	R&S	FSU26	1166.1660.26	Oct. 16, 2016	1 Year
Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	Oct. 27, 2016	1 Year
Active Loop antenna	Schwarzbeck	FMZB-1519	1519-038	Oct. 16, 2016	1 Year
Broadband Horn antenna	Schwarzbeck	BBHA 9170	BBHA 9170 #790	Aug. 11, 2017	1 Year
Double Ridged Horn Antenna	R&S	HF907	100276	Oct. 12, 2016	1 Year
Pre-amplifier	A.H.	PAM-0118	360	Oct. 16, 2016	1 Year
RF Cable	HUBSER	CP-X2	W11.03	Oct. 16, 2016	1 Year
RF Cable	HUBSER	CP-X1	W12.02	Oct. 16, 2016	1 Year
MI Cable	HUBSER	C10-01-01-1M	1091629	Oct. 16, 2016	1 Year
Test software	Audix	E3	V 6.11111b	N/A	N/A
Power Line Conducted Emissions Test					
Test Receiver	R&S	ESU8	100316	Oct. 16, 2016	1 Year
LISN 1	R&S	ENV216	101109	Oct. 16, 2016	1 Year
LISN 2	R&S	ESH2-Z5	100309	Oct. 16, 2016	1 Year
Pulse Limiter	R&S	ESH3-Z2	101242	Oct. 16, 2016	1 Year
CE Cable 1	HUBSER	ESU8/RF2	W10.01	Oct. 16, 2016	1 Year
Test software	Audix	E3	V 6.11111b	N/A	N/A

4. On Time and Duty Cycle

4.1. Block diagram of test setup



4.2. Limits

None: for reporting purposes only.

4.3. Test Procedure

- (1) Set the Centre frequency of the spectrum analyzer to the transmitting frequency;
- (2) Set the span=0MHz, RBW=8MHz, VBW=50MHz, Sweep time=5ms;
- (3) Detector = peak;
- (4) Trace mode = Single hold.

4.4. Test Result

Test Mode	Test Channel	Ant	Duty Cycle[%]	10log(1/x) Factor[dB]
11N20MIMO	5180	Ant1	89.11	0.50
11N20MIMO	5180	Ant2	89.6	0.48
11N20MIMO	5200	Ant1	89.11	0.50
11N20MIMO	5200	Ant2	89.6	0.48
11N20MIMO	5240	Ant1	89.11	0.50
11N20MIMO	5240	Ant2	89.11	0.50
11N20MIMO	5260	Ant1	89.11	0.50
11N20MIMO	5260	Ant2	89.6	0.48
11N20MIMO	5280	Ant1	89.11	0.50
11N20MIMO	5280	Ant2	89.11	0.50
11N20MIMO	5320	Ant1	89.11	0.50
11N20MIMO	5320	Ant2	89.6	0.48
11N20MIMO	5500	Ant1	89.11	0.50
11N20MIMO	5500	Ant2	89.11	0.50
11N20MIMO	5580	Ant1	89.11	0.50

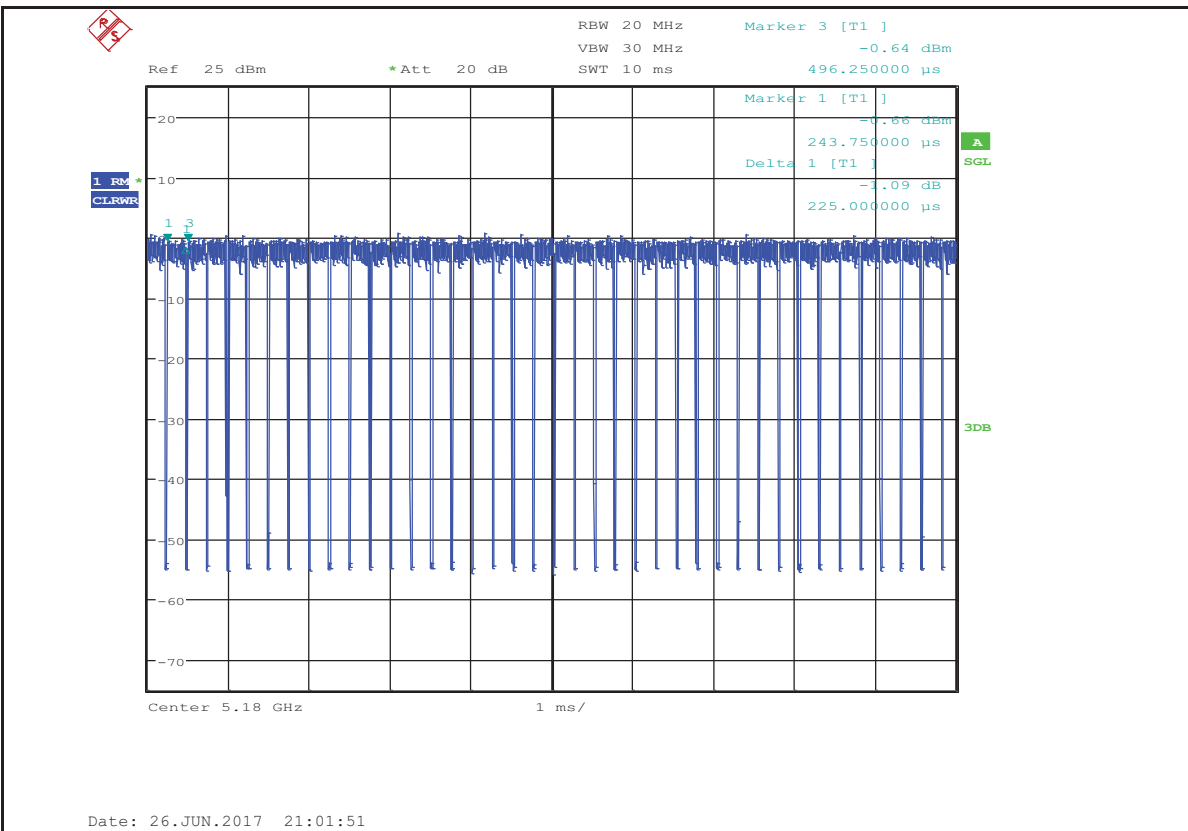
11N20MIMO	5580	Ant2	89.6	0.48
11N20MIMO	5700	Ant1	89.11	0.50
11N20MIMO	5700	Ant2	89.6	0.48
11N20MIMO	5745	Ant1	89.11	0.50
11N20MIMO	5745	Ant2	89.11	0.50
11N20MIMO	5785	Ant1	89.6	0.48
11N20MIMO	5785	Ant2	89.11	0.50
11N20MIMO	5825	Ant1	89.11	0.50
11N20MIMO	5825	Ant2	89.55	0.48
11N40MIMO	5190	Ant1	82.64	0.83
11N40MIMO	5190	Ant2	82.79	0.82
11N40MIMO	5230	Ant1	82.79	0.82
11N40MIMO	5230	Ant2	82.79	0.82
11N40MIMO	5270	Ant1	82.79	0.82
11N40MIMO	5270	Ant2	81.97	0.86
11N40MIMO	5310	Ant1	82.79	0.82
11N40MIMO	5310	Ant2	82.64	0.83
11N40MIMO	5510	Ant1	82.79	0.82
11N40MIMO	5510	Ant2	81.97	0.86
11N40MIMO	5550	Ant1	81.97	0.86
11N40MIMO	5550	Ant2	81.97	0.86
11N40MIMO	5670	Ant1	82.79	0.82
11N40MIMO	5670	Ant2	81.97	0.86
11N40MIMO	5755	Ant1	81.97	0.86
11N40MIMO	5755	Ant2	81.97	0.86
11N40MIMO	5795	Ant1	82.79	0.82
11N40MIMO	5795	Ant2	81.97	0.86
11AC20MIMO	5180	Ant1	88.04	0.55
11AC20MIMO	5180	Ant2	87.56	0.58
11AC20MIMO	5200	Ant1	88.04	0.55
11AC20MIMO	5200	Ant2	87.56	0.58
11AC20MIMO	5240	Ant1	88.04	0.55
11AC20MIMO	5240	Ant2	88.04	0.55
11AC20MIMO	5260	Ant1	87.62	0.57
11AC20MIMO	5260	Ant2	87.62	0.57
11AC20MIMO	5280	Ant1	87.56	0.58
11AC20MIMO	5280	Ant2	87.56	0.58
11AC20MIMO	5320	Ant1	87.56	0.58
11AC20MIMO	5320	Ant2	87.56	0.58
11AC20MIMO	5500	Ant1	88.04	0.55

11AC20MIMO	5500	Ant2	87.56	0.58
11AC20MIMO	5580	Ant1	88.04	0.55
11AC20MIMO	5580	Ant2	87.56	0.58
11AC20MIMO	5700	Ant1	87.56	0.58
11AC20MIMO	5700	Ant2	87.62	0.57
11AC20MIMO	5745	Ant1	87.56	0.58
11AC20MIMO	5745	Ant2	88.04	0.55
11AC20MIMO	5785	Ant1	88.04	0.55
11AC20MIMO	5785	Ant2	87.62	0.57
11AC20MIMO	5825	Ant1	87.62	0.57
11AC20MIMO	5825	Ant2	88.04	0.55
11AC40MIMO	5190	Ant1	80.62	0.94
11AC40MIMO	5190	Ant2	80.62	0.94
11AC40MIMO	5230	Ant1	79.84	0.98
11AC40MIMO	5230	Ant2	79.84	0.98
11AC40MIMO	5270	Ant1	80.62	0.94
11AC40MIMO	5270	Ant2	80.62	0.94
11AC40MIMO	5310	Ant1	79.84	0.98
11AC40MIMO	5310	Ant2	79.84	0.98
11AC40MIMO	5510	Ant1	79.84	0.98
11AC40MIMO	5510	Ant2	80.62	0.94
11AC40MIMO	5550	Ant1	80.62	0.94
11AC40MIMO	5550	Ant2	79.84	0.98
11AC40MIMO	5670	Ant1	80.62	0.94
11AC40MIMO	5670	Ant2	79.84	0.98
11AC40MIMO	5755	Ant1	79.84	0.98
11AC40MIMO	5755	Ant2	79.84	0.98
11AC40MIMO	5795	Ant1	80.62	0.94
11AC40MIMO	5795	Ant2	80.62	0.94
11AC80MIMO	5210	Ant1	71.43	1.46
11AC80MIMO	5210	Ant2	71.43	1.46
11AC80MIMO	5290	Ant1	71.43	1.46
11AC80MIMO	5290	Ant2	72.22	1.41
11AC80MIMO	5530	Ant1	71.43	1.46
11AC80MIMO	5530	Ant2	71.43	1.46
11AC80MIMO	5775	Ant1	71.11	1.48
11AC80MIMO	5775	Ant2	71.11	1.48
11AMIMO	5180	Ant1	89.91	0.46
11AMIMO	5180	Ant2	89.91	0.46
11AMIMO	5200	Ant1	89.91	0.46

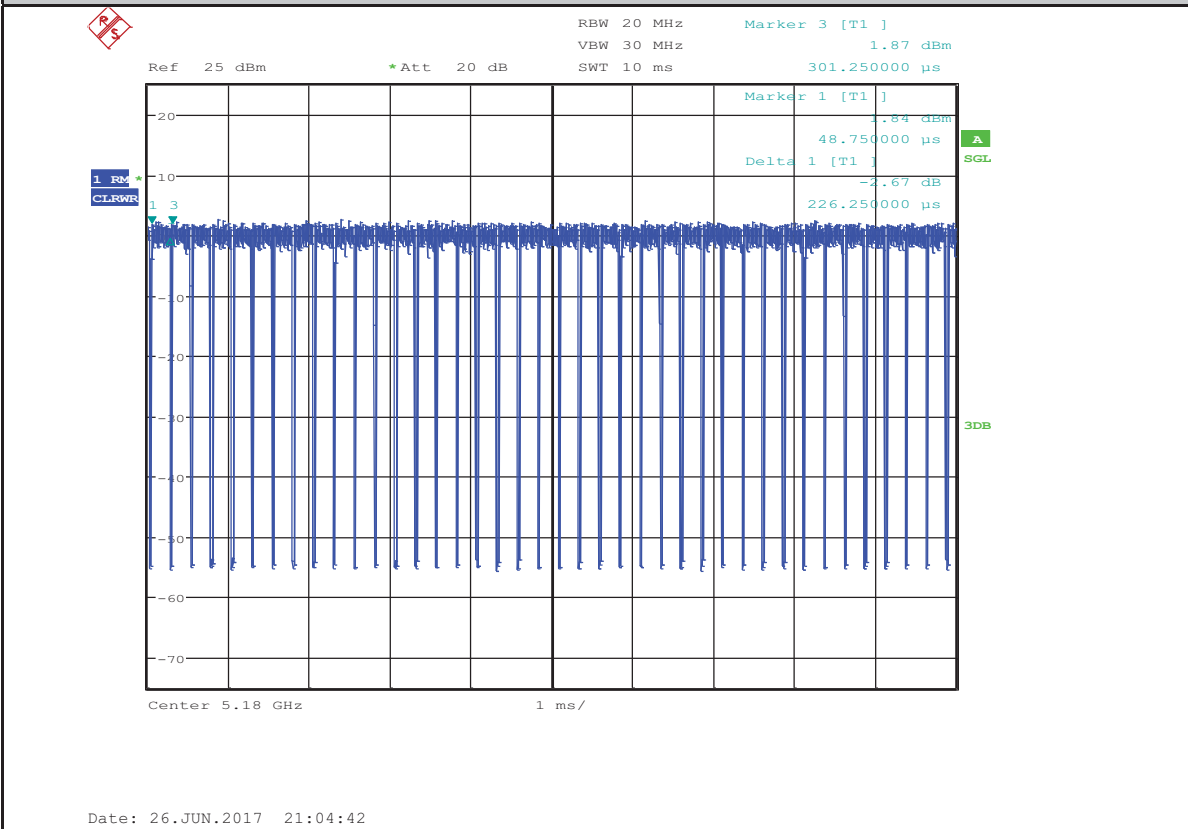
11AMIMO	5200	Ant2	90.37	0.44
11AMIMO	5240	Ant1	90.32	0.44
11AMIMO	5240	Ant2	89.91	0.46
11AMIMO	5260	Ant1	89.91	0.46
11AMIMO	5260	Ant2	90.37	0.44
11AMIMO	5280	Ant1	89.91	0.46
11AMIMO	5280	Ant2	89.91	0.46
11AMIMO	5320	Ant1	89.91	0.46
11AMIMO	5320	Ant2	90.37	0.44
11AMIMO	5500	Ant1	89.91	0.46
11AMIMO	5500	Ant2	90.37	0.44
11AMIMO	5580	Ant1	90.37	0.44
11AMIMO	5580	Ant2	89.91	0.46
11AMIMO	5700	Ant1	89.95	0.46
11AMIMO	5700	Ant2	90.37	0.44
11AMIMO	5745	Ant1	89.91	0.46
11AMIMO	5745	Ant2	90.32	0.44
11AMIMO	5785	Ant1	90.32	0.44
11AMIMO	5785	Ant2	89.91	0.46
11AMIMO	5825	Ant1	89.91	0.46
11AMIMO	5825	Ant2	89.95	0.46

4.5. Original test data

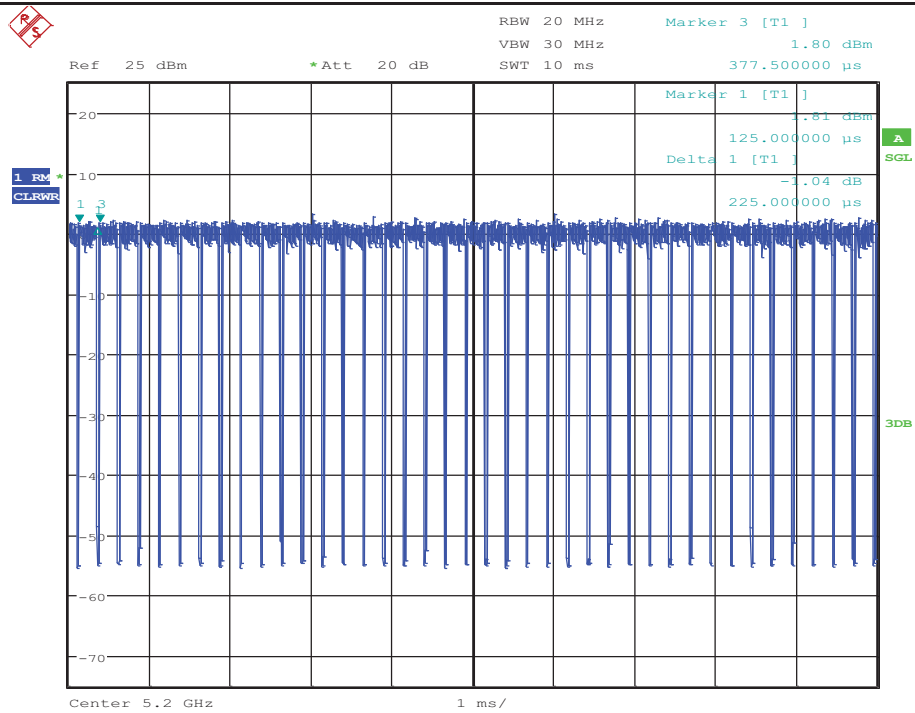
Duty Cycle_11N20MIMO_5180_Ant1



Duty Cycle_11N20MIMO_5180_Ant2

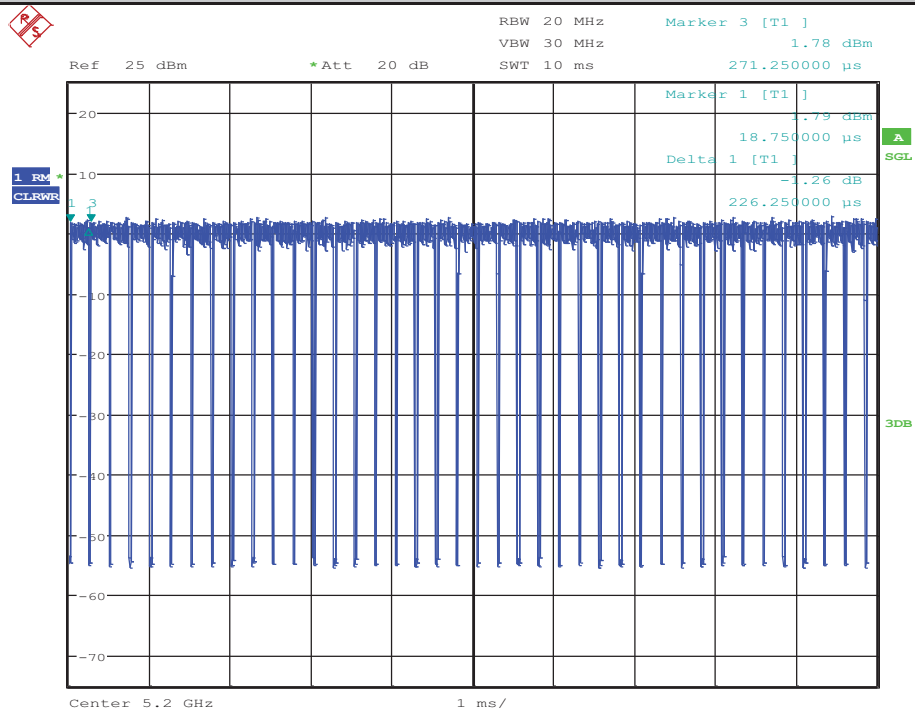


Duty Cycle_11N20MIMO_5200_Ant1



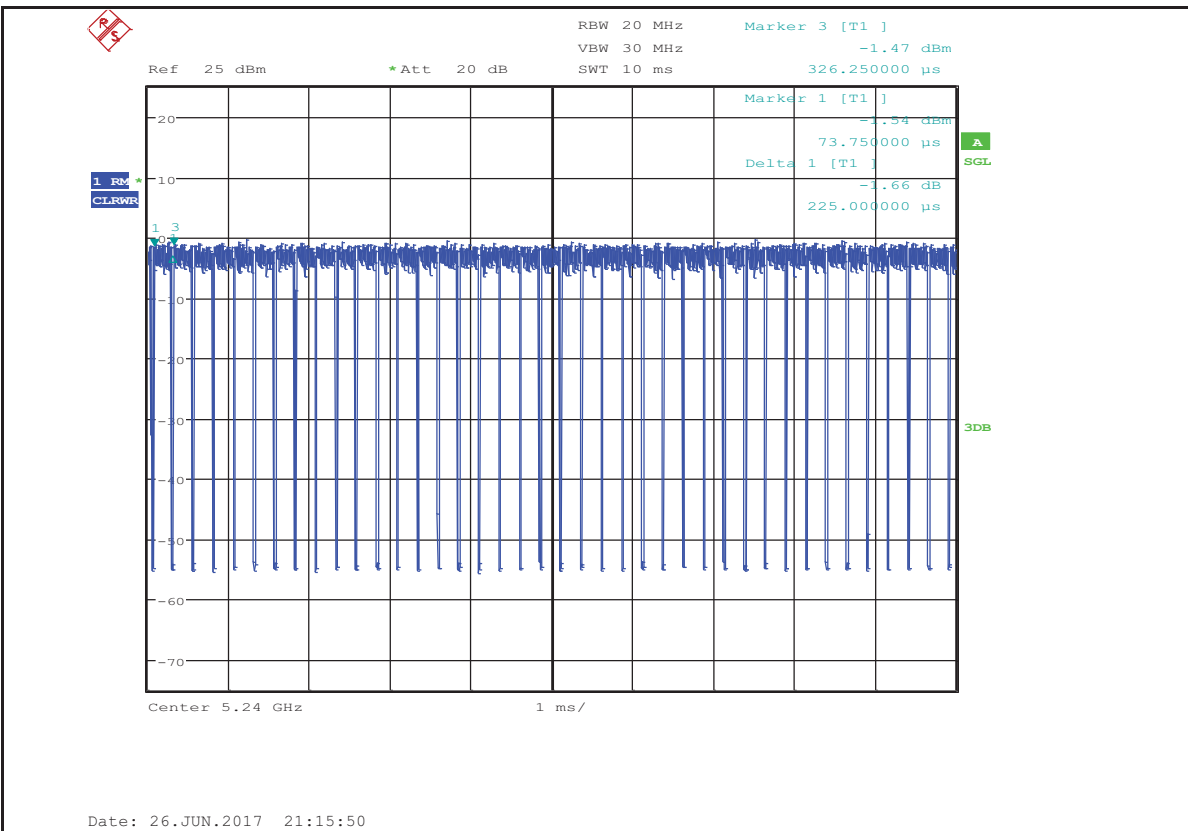
Date: 26.JUN.2017 21:08:17

Duty Cycle_11N20MIMO_5200_Ant2

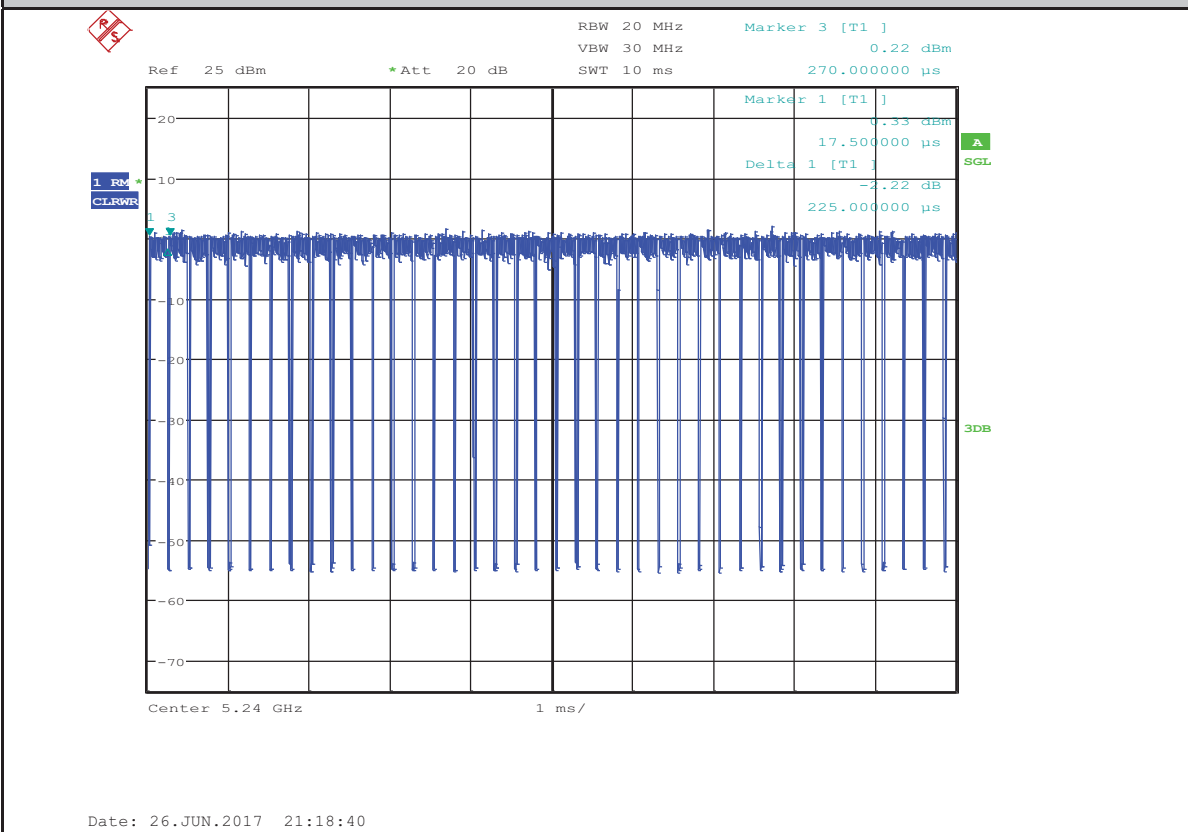


Date: 26.JUN.2017 21:11:07

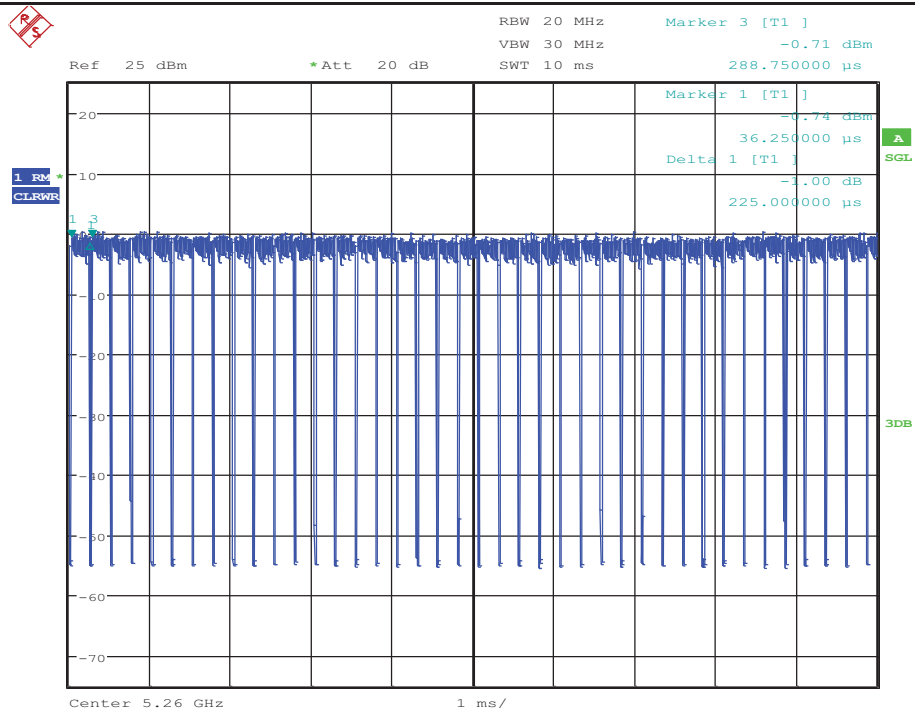
Duty Cycle_11N20MIMO_5240_Ant1



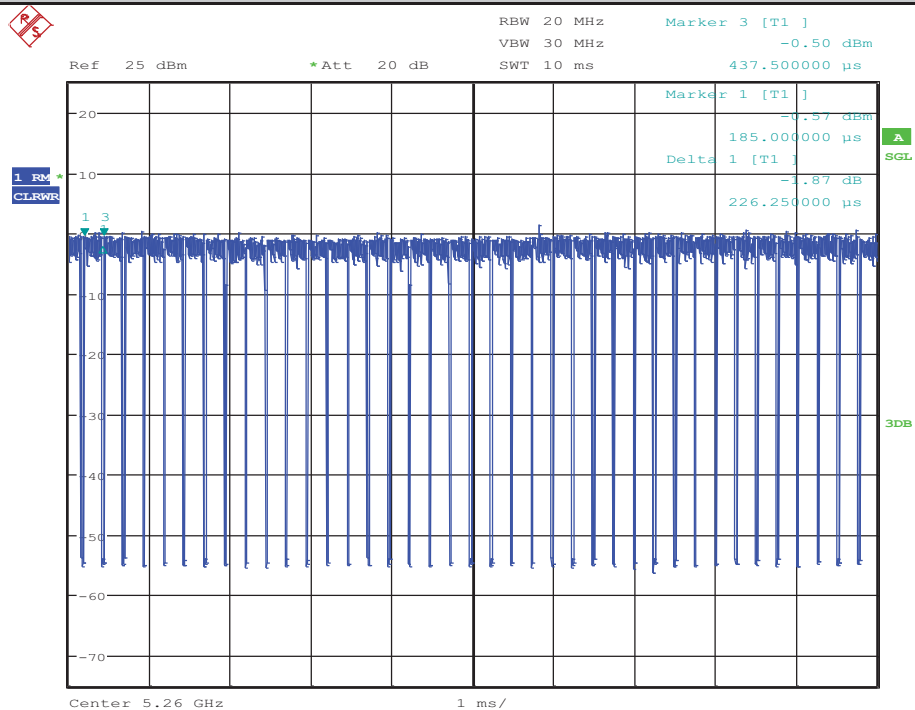
Duty Cycle_11N20MIMO_5240_Ant2



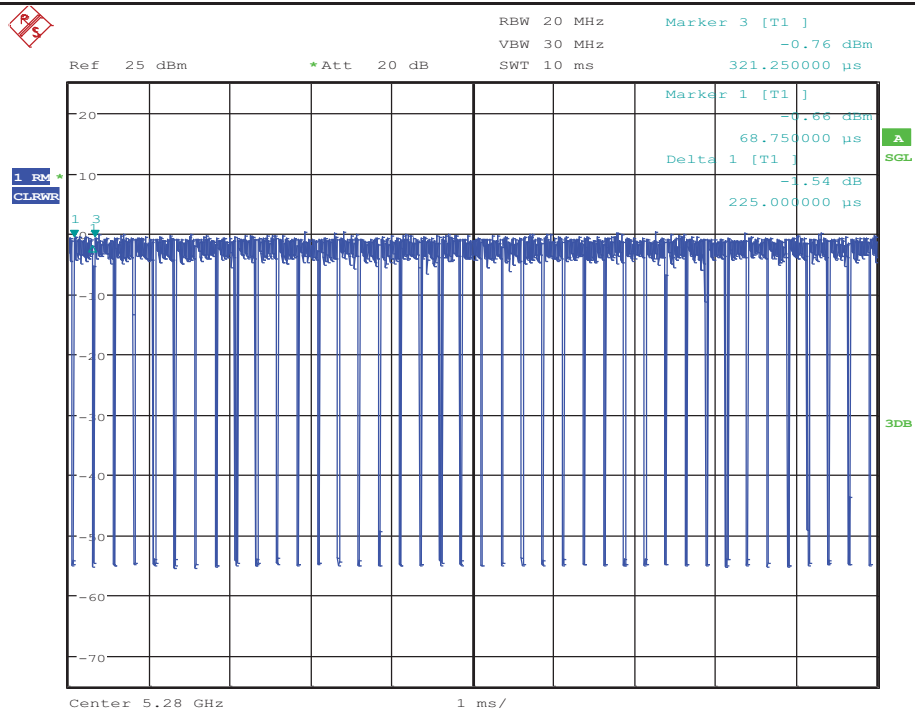
Duty Cycle_11N20MIMO_5260_Ant1



Duty Cycle_11N20MIMO_5260_Ant2

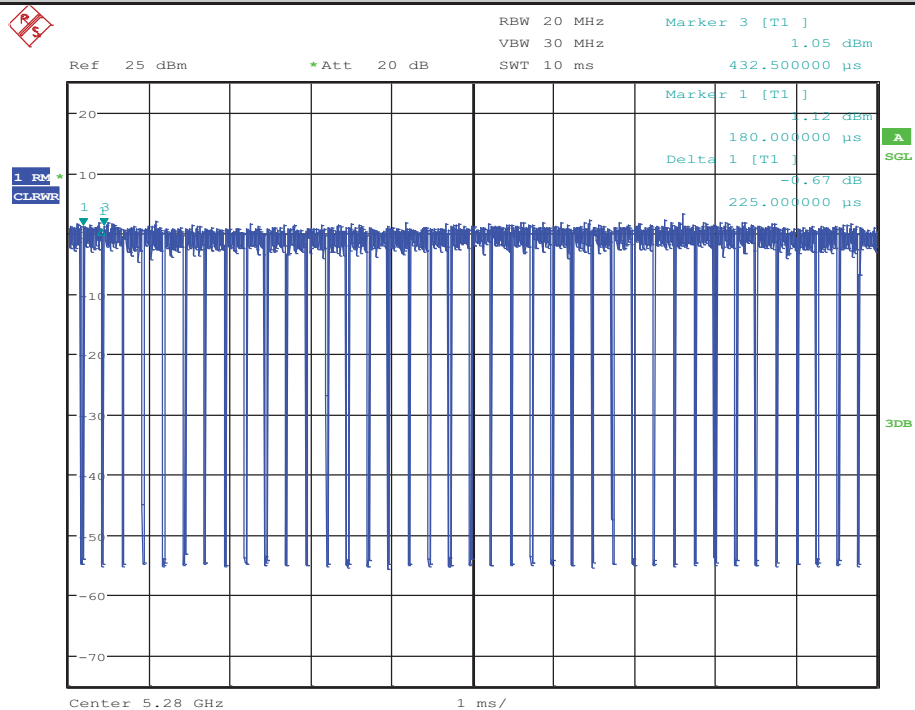


Duty Cycle_11N20MIMO_5280_Ant1



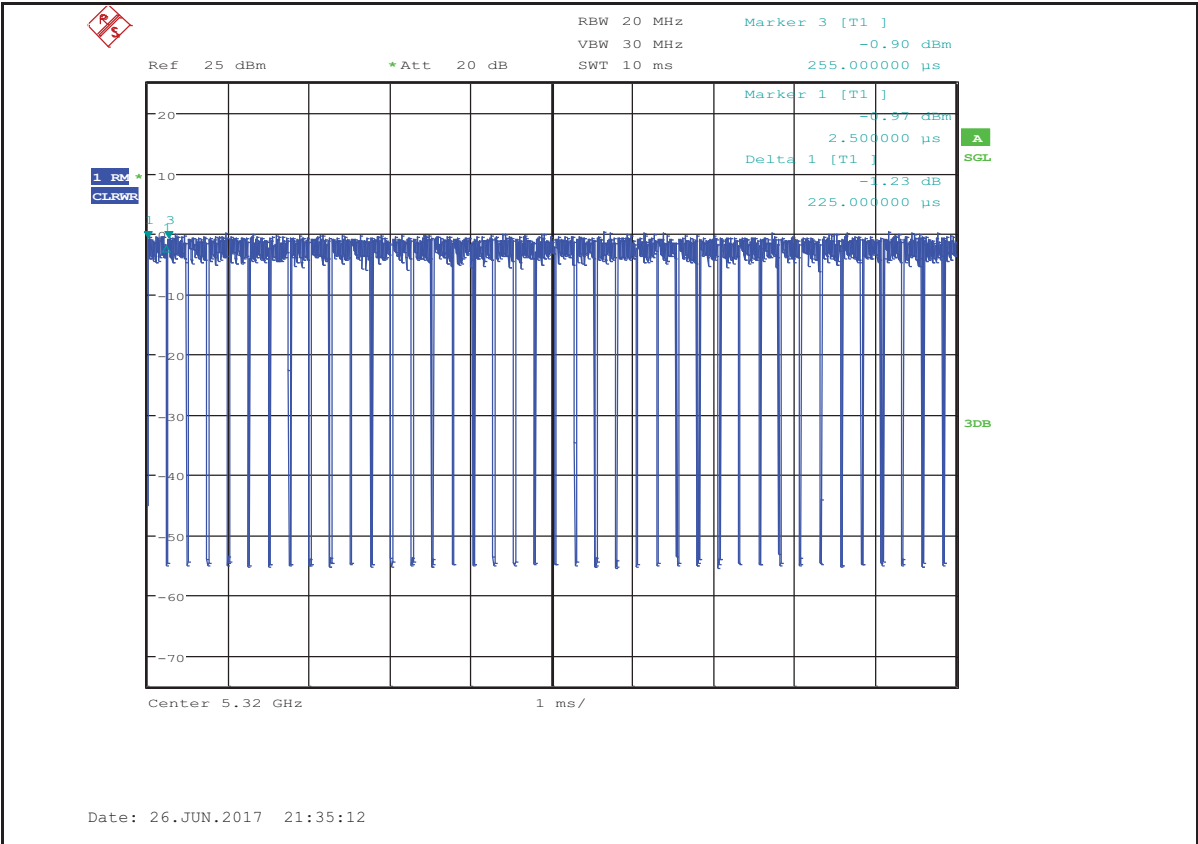
Date: 26.JUN.2017 21:28:41

Duty Cycle_11N20MIMO_5280_Ant2

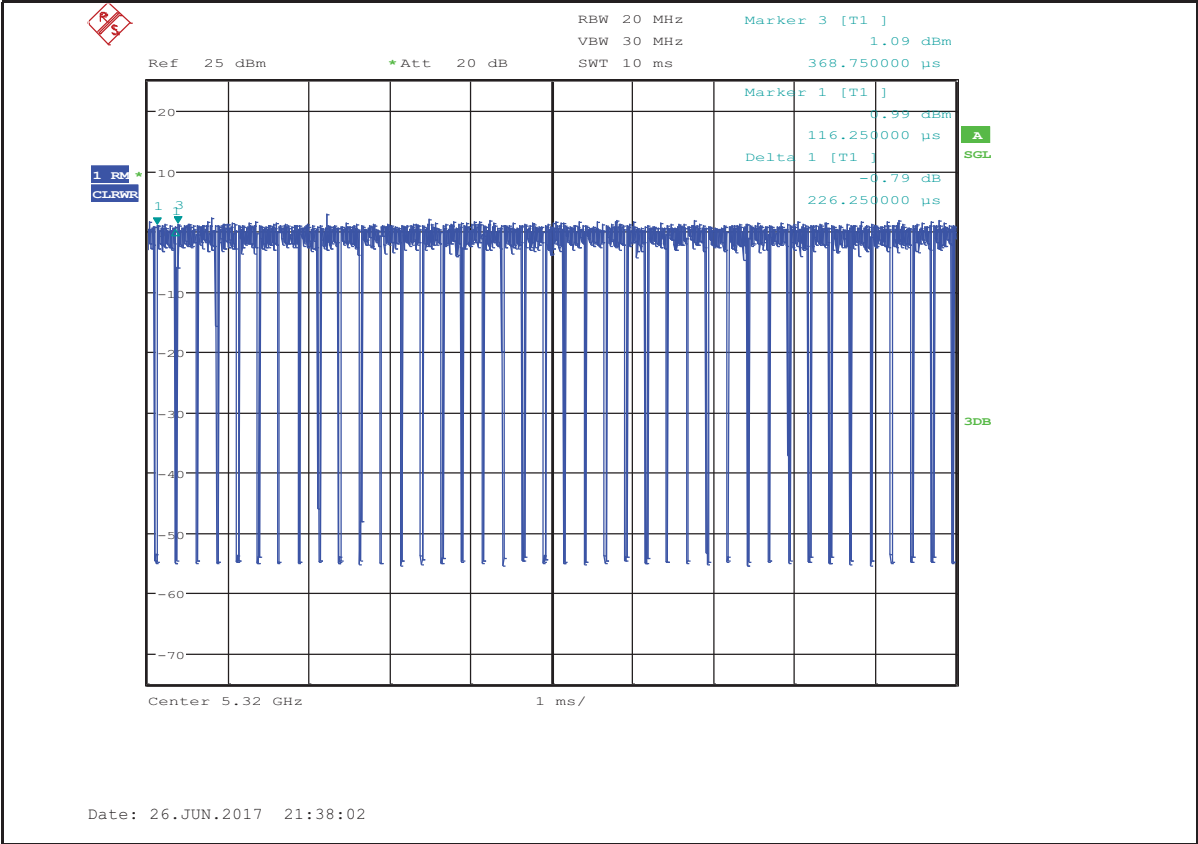


Date: 26.JUN.2017 21:31:32

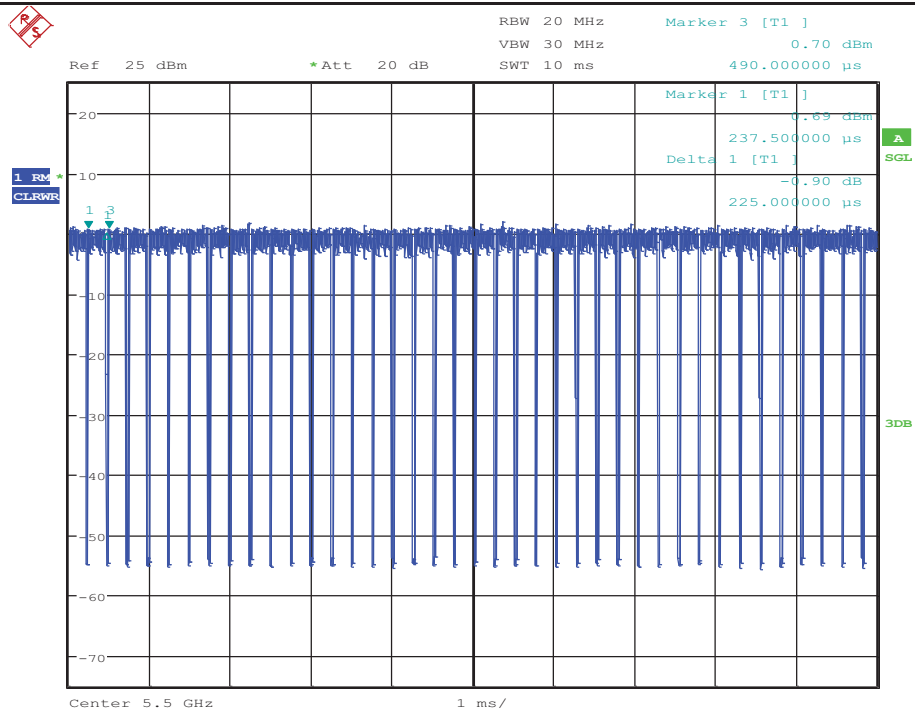
Duty Cycle_11N20MIMO_5320_Ant1



Duty Cycle_11N20MIMO_5320_Ant2

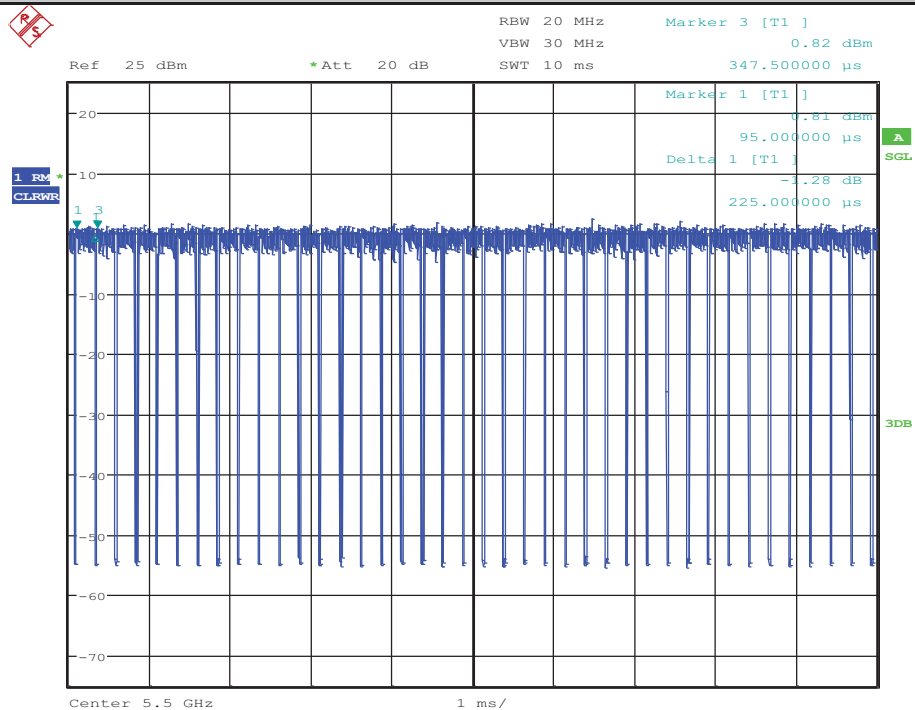


Duty Cycle_11N20MIMO_5500_Ant1



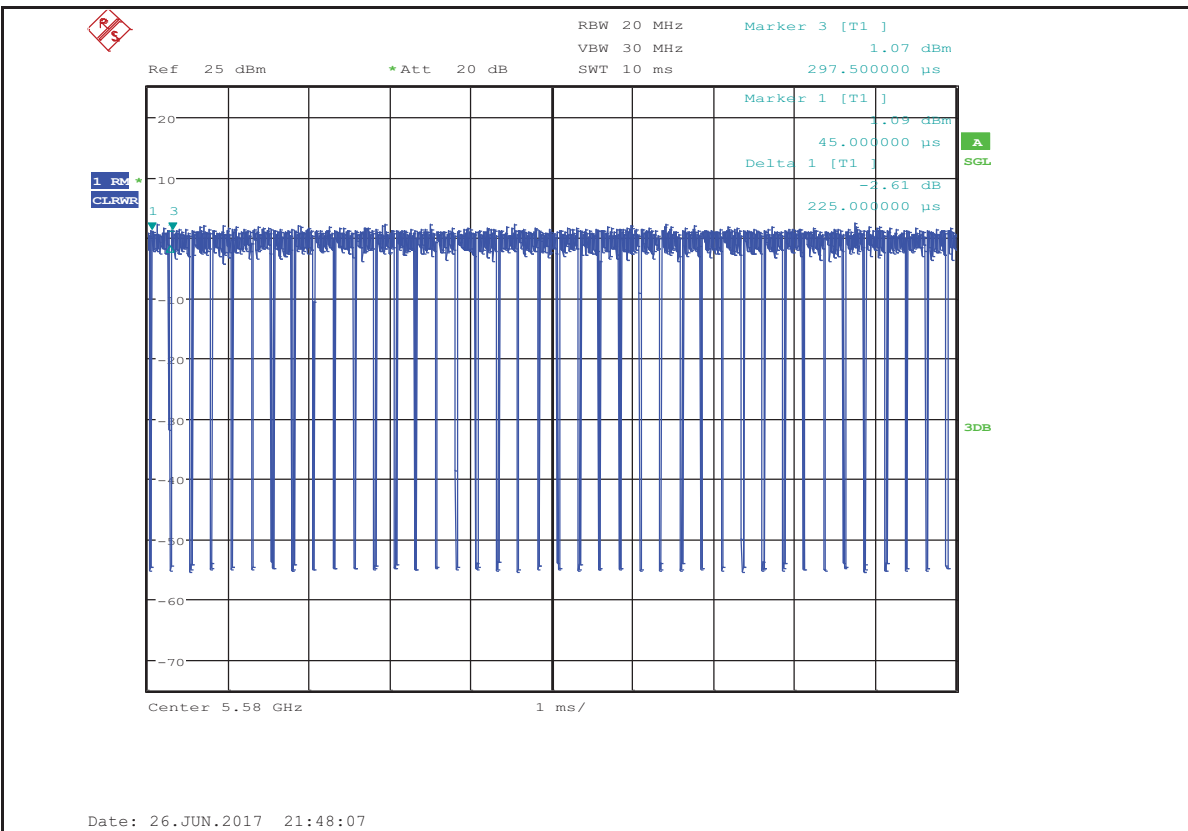
Date: 26.JUN.2017 21:41:41

Duty Cycle_11N20MIMO_5500_Ant2

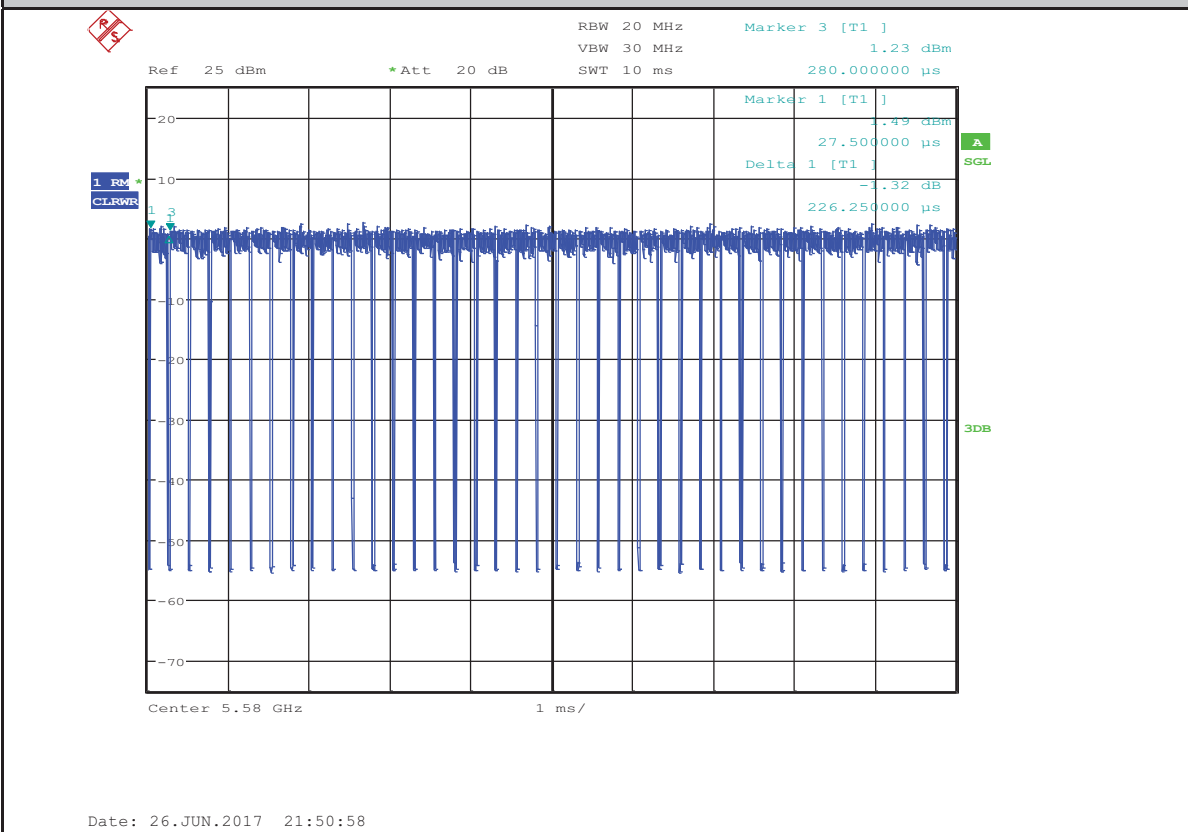


Date: 26.JUN.2017 21:44:31

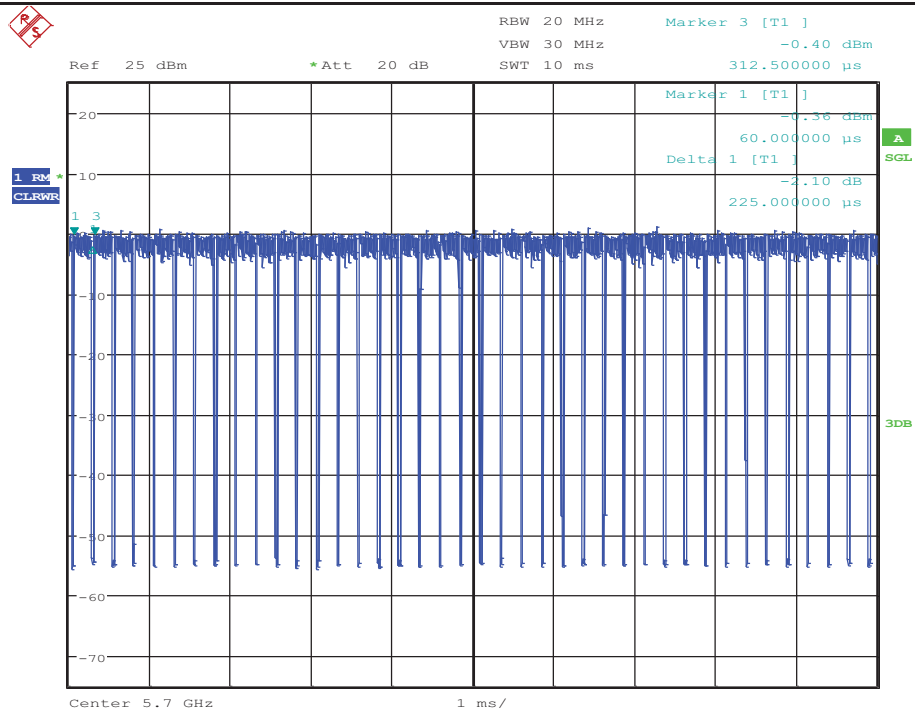
Duty Cycle_11N20MIMO_5580_Ant1



Duty Cycle_11N20MIMO_5580_Ant2

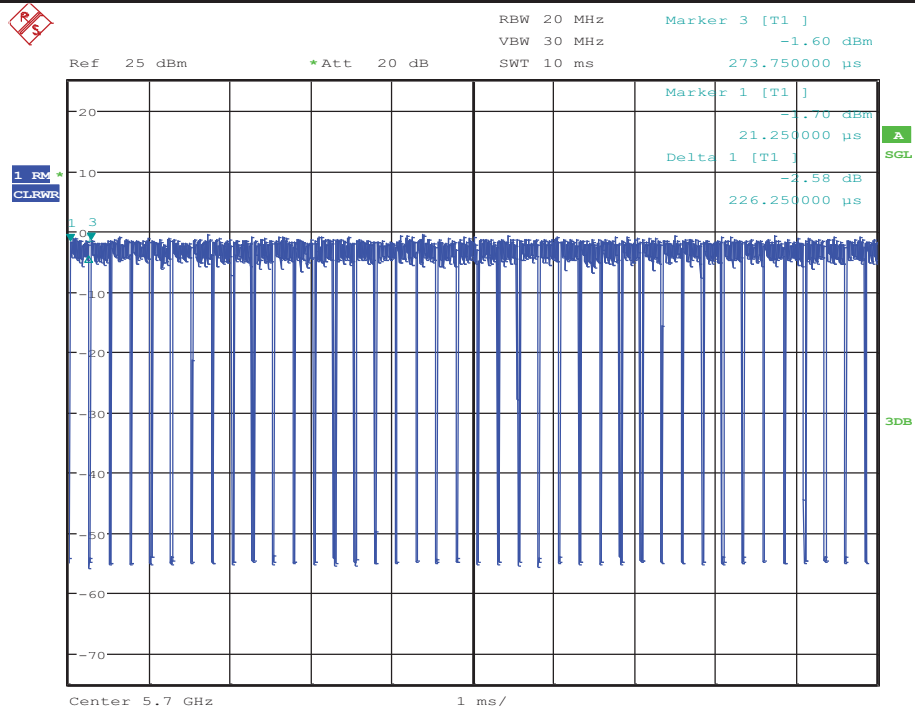


Duty Cycle_11N20MIMO_5700_Ant1



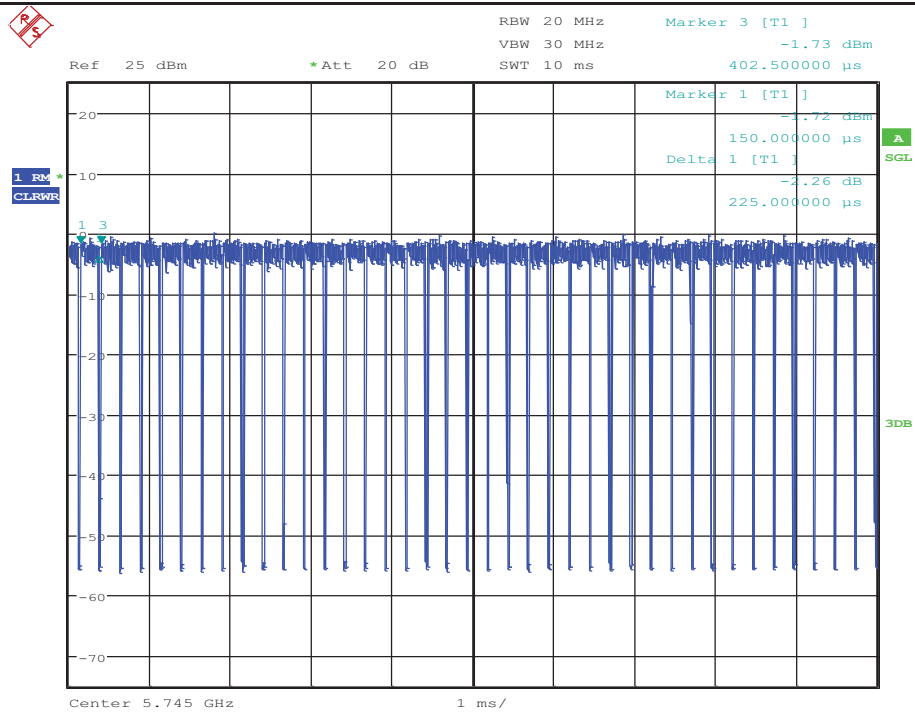
Date: 26.JUN.2017 21:54:44

Duty Cycle_11N20MIMO_5700_Ant2



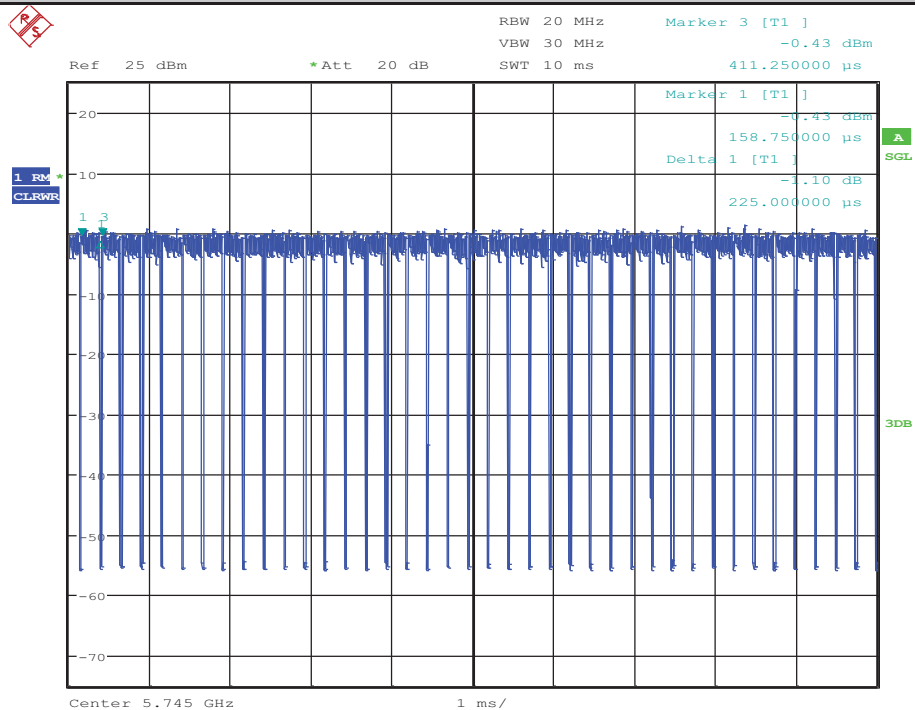
Date: 26.JUN.2017 21:57:35

Duty Cycle_11N20MIMO_5745_Ant1



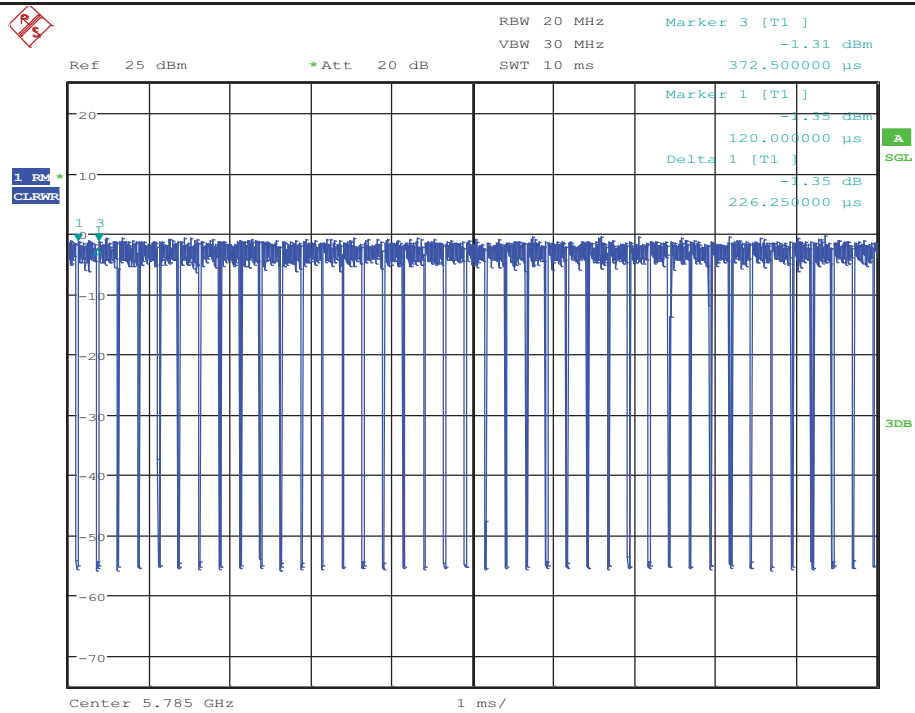
Date: 27.JUN.2017 09:32:56

Duty Cycle_11N20MIMO_5745_Ant2



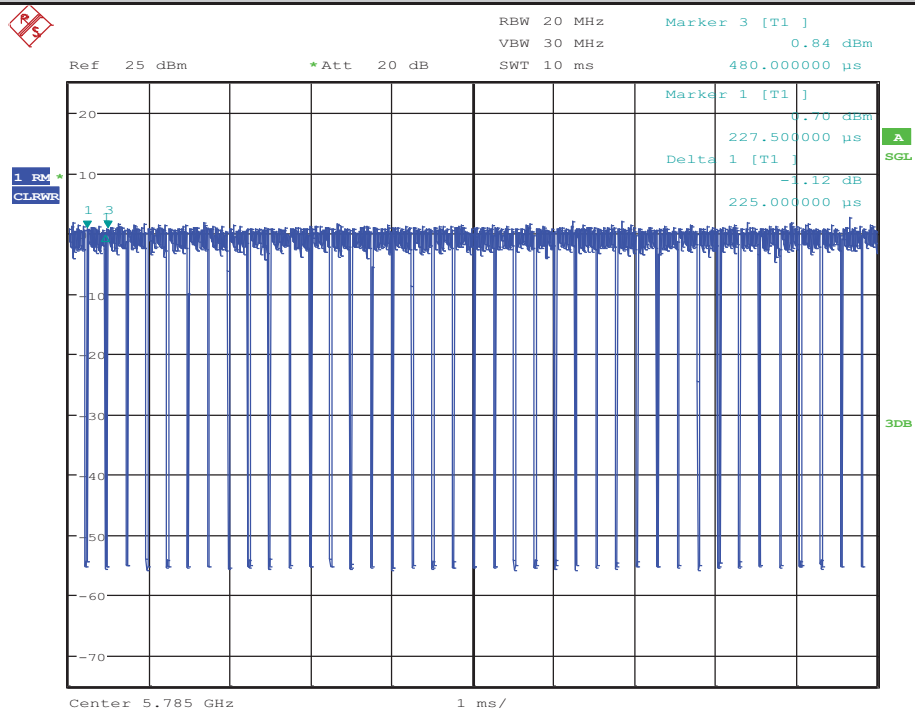
Date: 27.JUN.2017 09:34:51

Duty Cycle_11N20MIMO_5785_Ant1



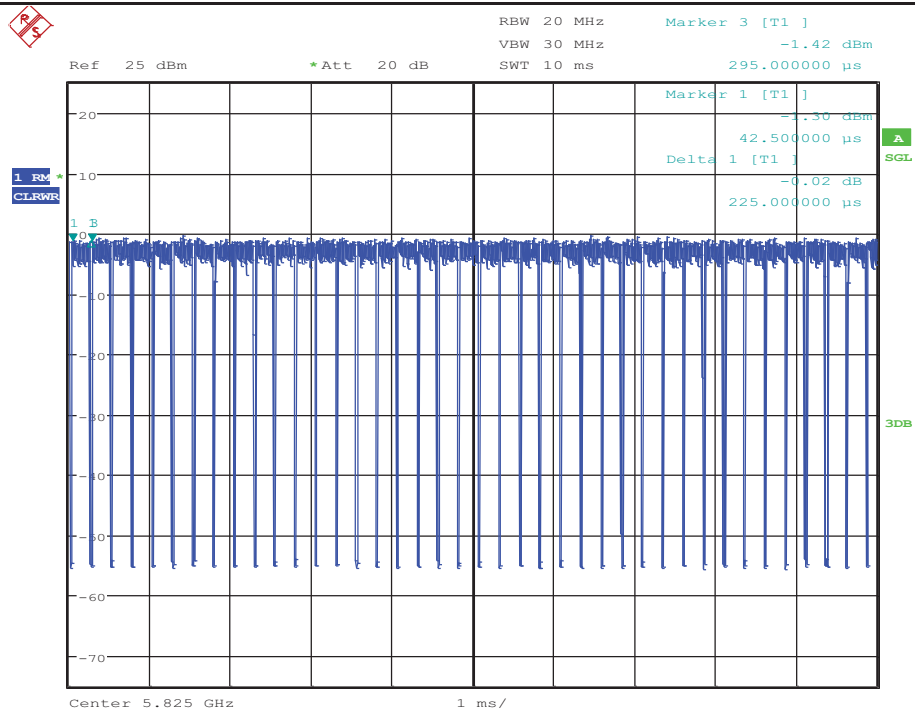
Date: 27.JUN.2017 09:37:59

Duty Cycle_11N20MIMO_5785_Ant2

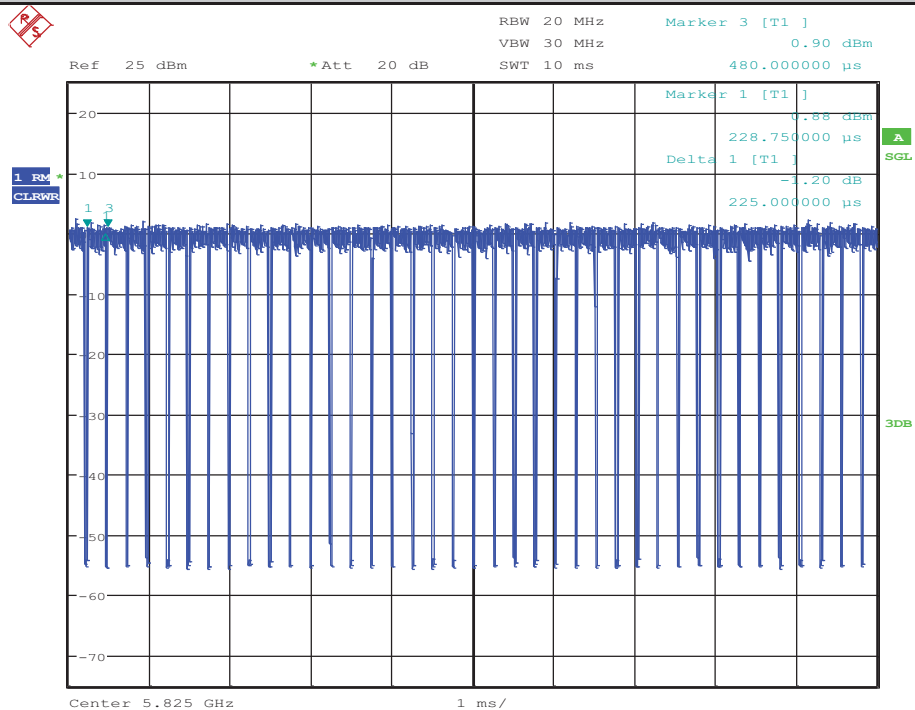


Date: 27.JUN.2017 09:39:54

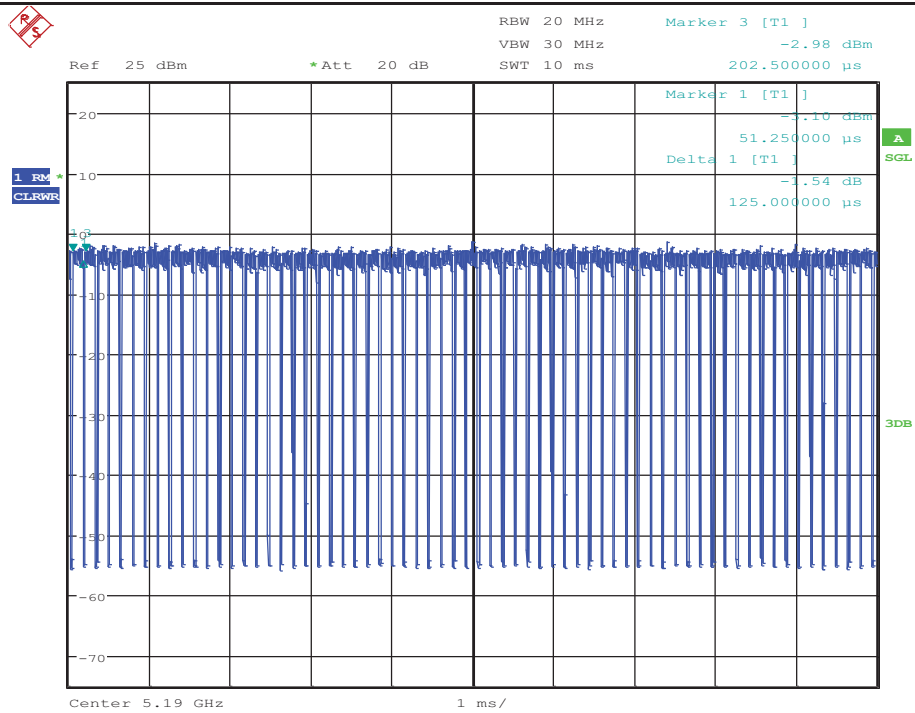
Duty Cycle_11N20MIMO_5825_Ant1



Duty Cycle_11N20MIMO_5825_Ant2

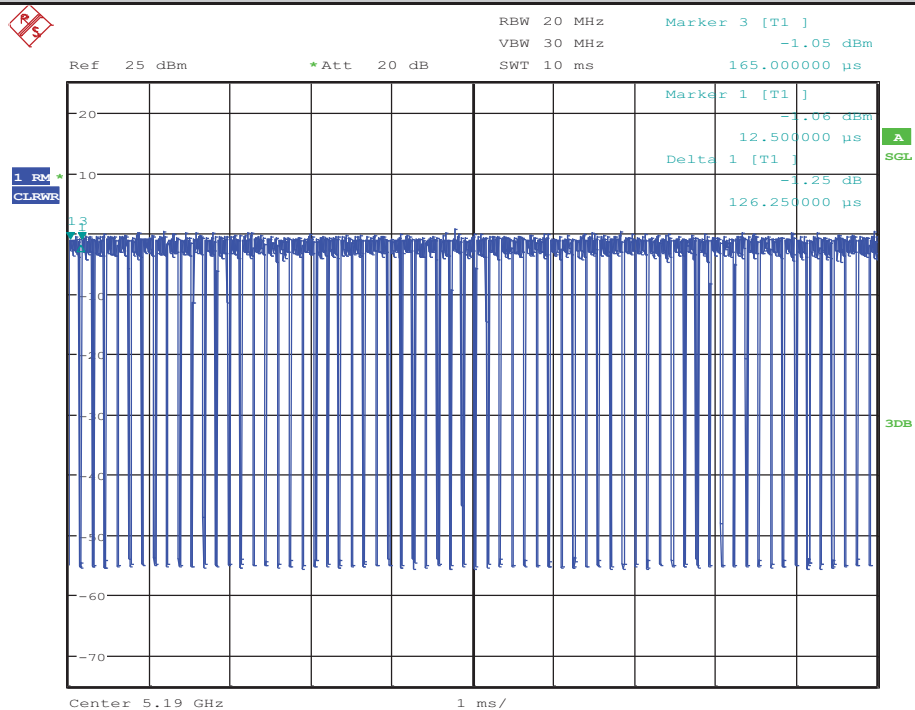


Duty Cycle_11N40MIMO_5190_Ant1



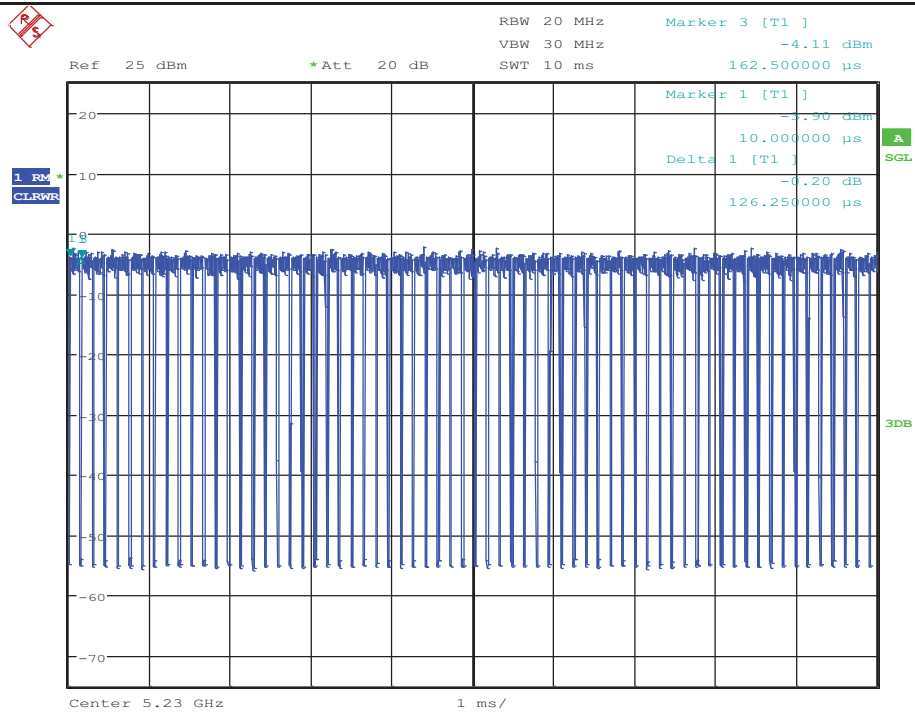
Date: 27.JUN.2017 10:03:56

Duty Cycle_11N40MIMO_5190_Ant2



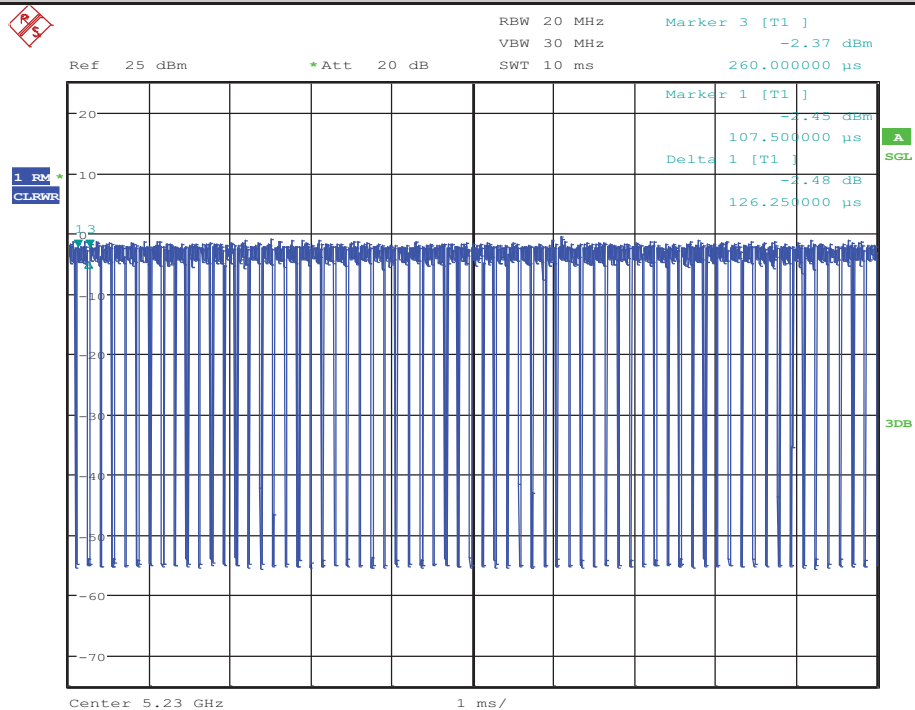
Date: 27.JUN.2017 10:06:15

Duty Cycle_11N40MIMO_5230_Ant1



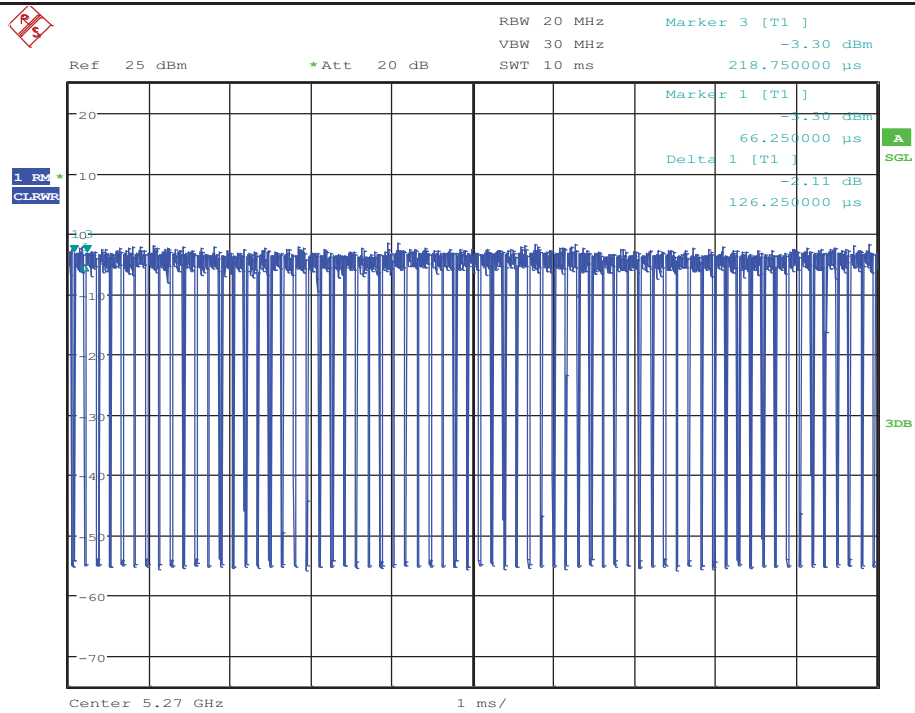
Date: 27.JUN.2017 10:11:50

Duty Cycle_11N40MIMO_5230_Ant2



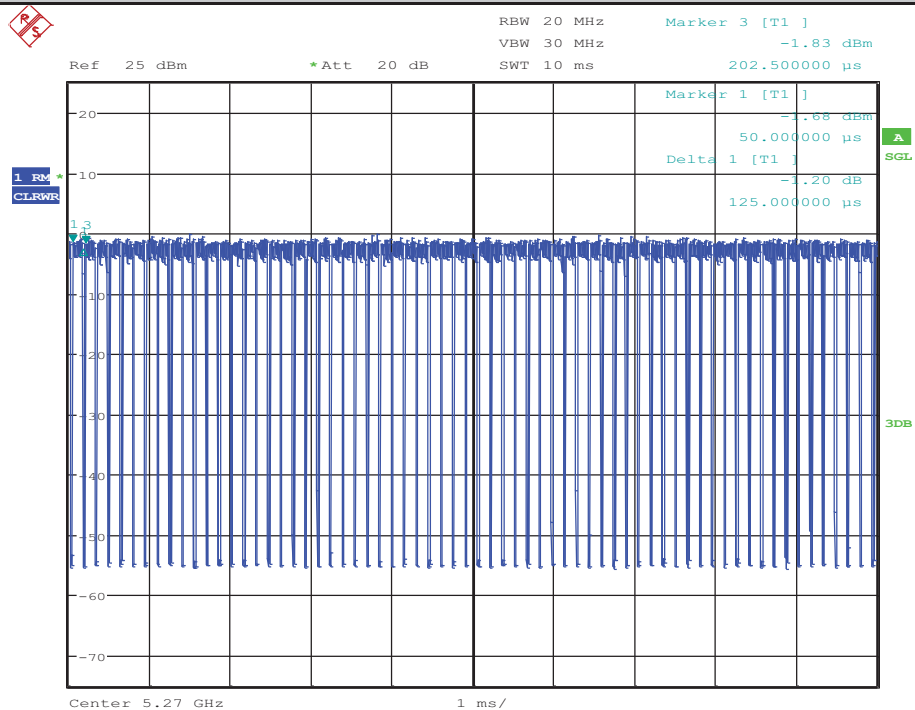
Date: 27.JUN.2017 10:14:10

Duty Cycle_11N40MIMO_5270_Ant1



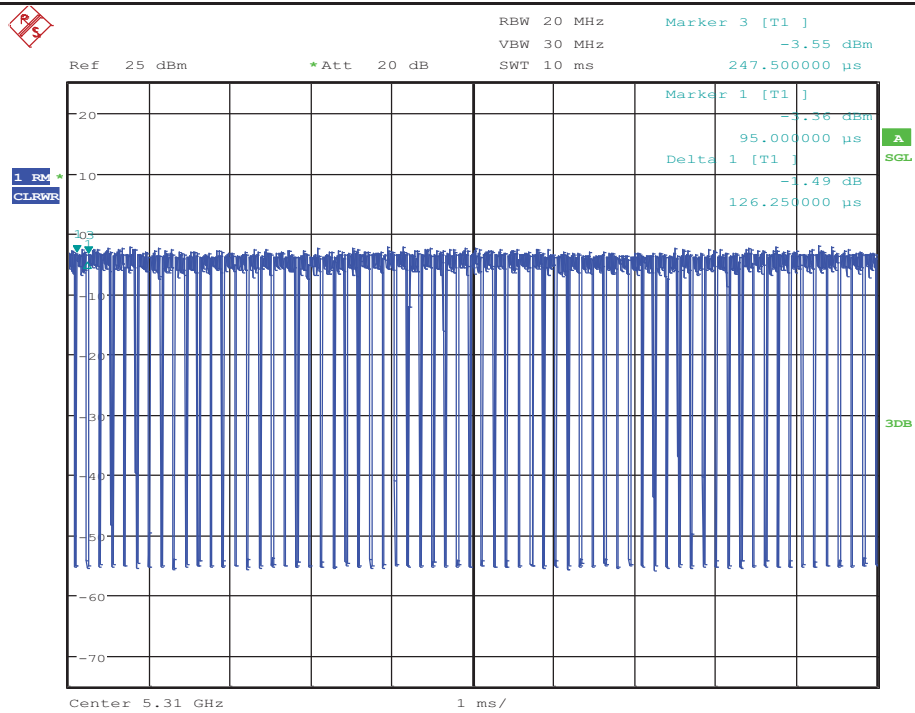
Date: 27.JUN.2017 10:24:27

Duty Cycle_11N40MIMO_5270_Ant2



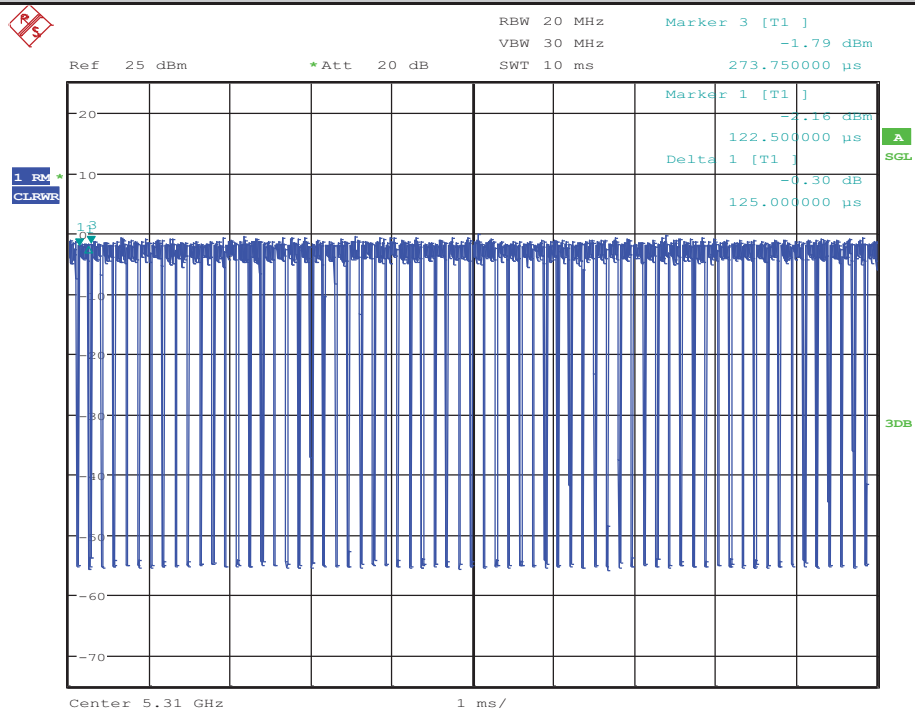
Date: 27.JUN.2017 10:26:45

Duty Cycle_11N40MIMO_5310_Ant1



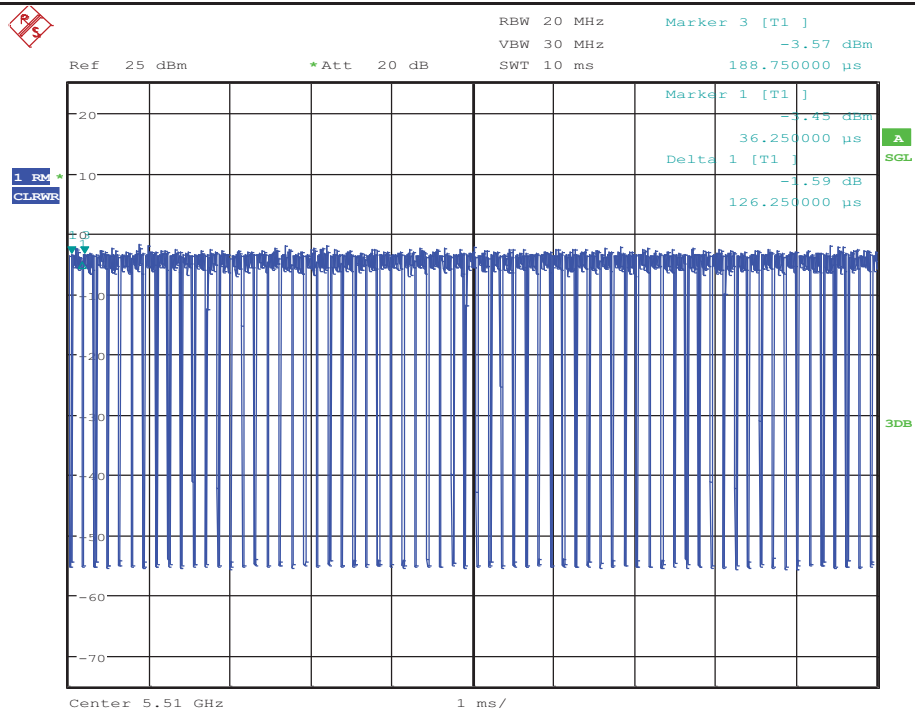
Date: 27.JUN.2017 10:31:56

Duty Cycle_11N40MIMO_5310_Ant2



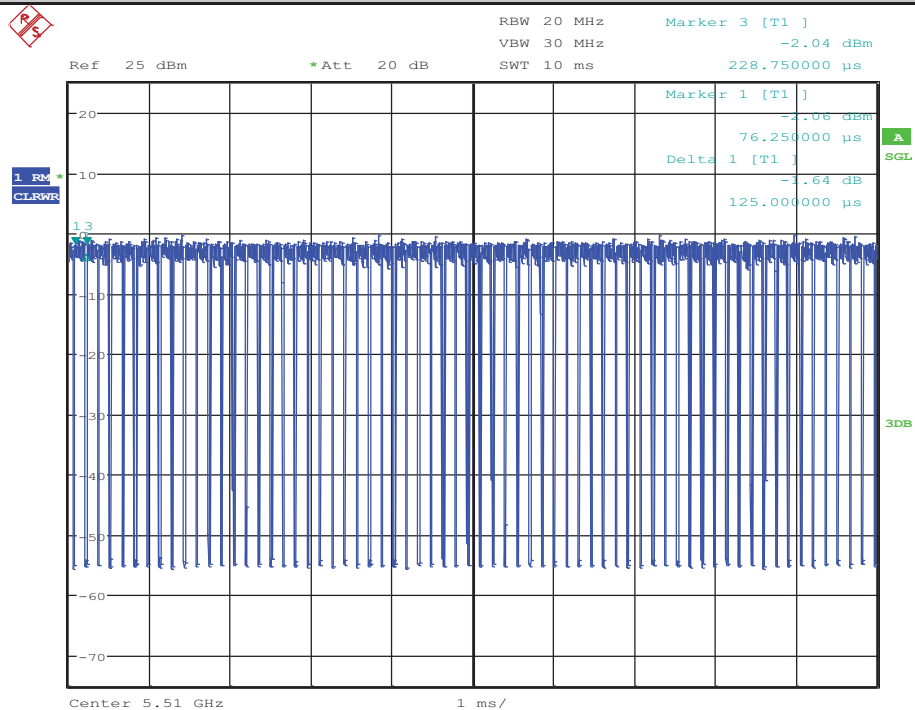
Date: 27.JUN.2017 10:34:16

Duty Cycle_11N40MIMO_5510_Ant1



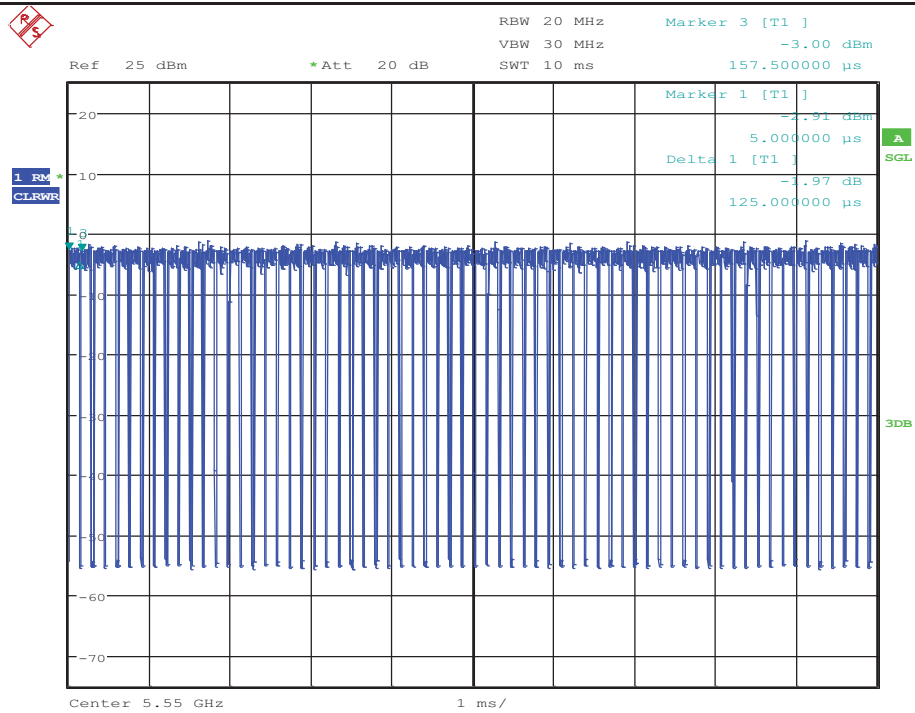
Date: 27.JUN.2017 10:37:34

Duty Cycle_11N40MIMO_5510_Ant2

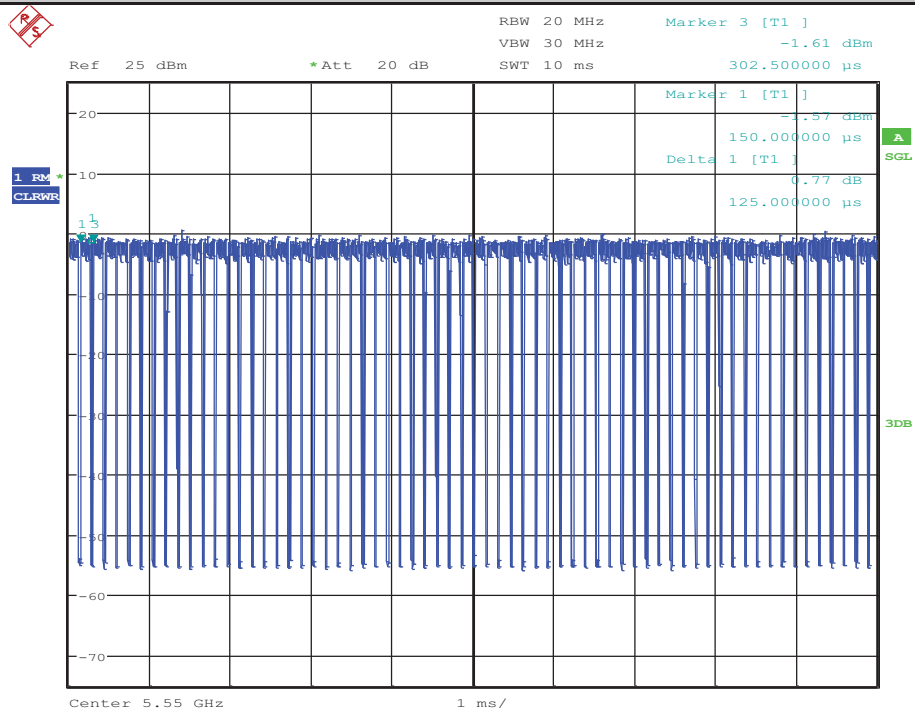


Date: 27.JUN.2017 10:39:53

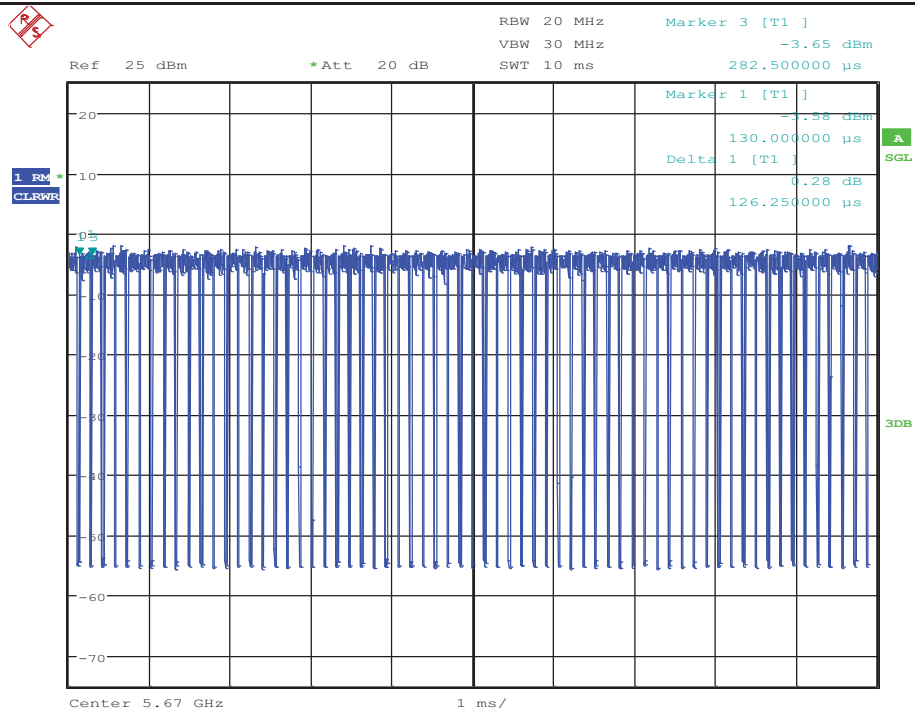
Duty Cycle_11N40MIMO_5550_Ant1



Duty Cycle_11N40MIMO_5550_Ant2

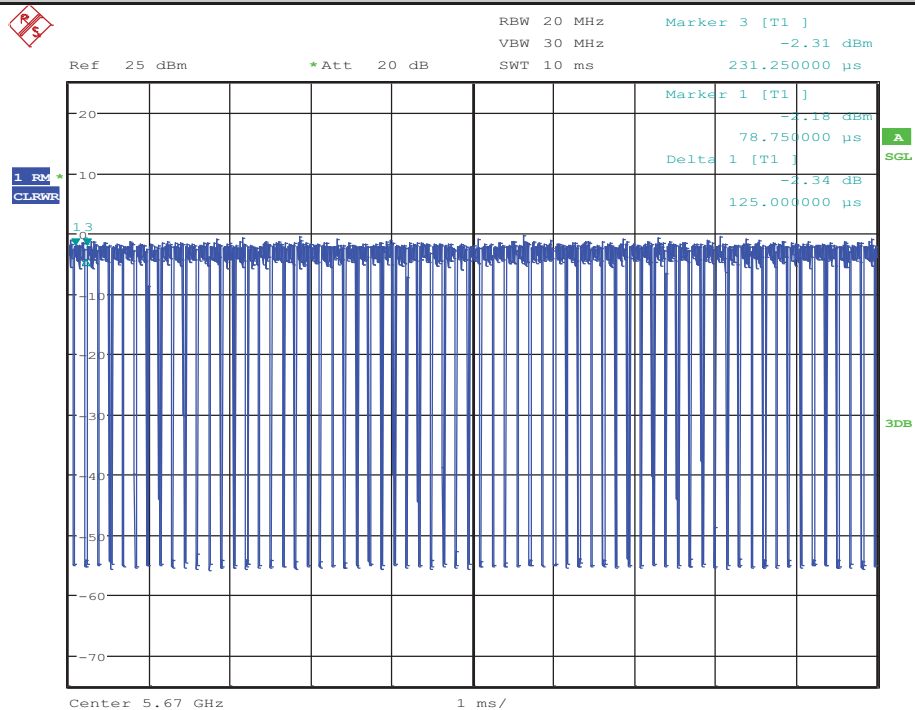


Duty Cycle_11N40MIMO_5670_Ant1



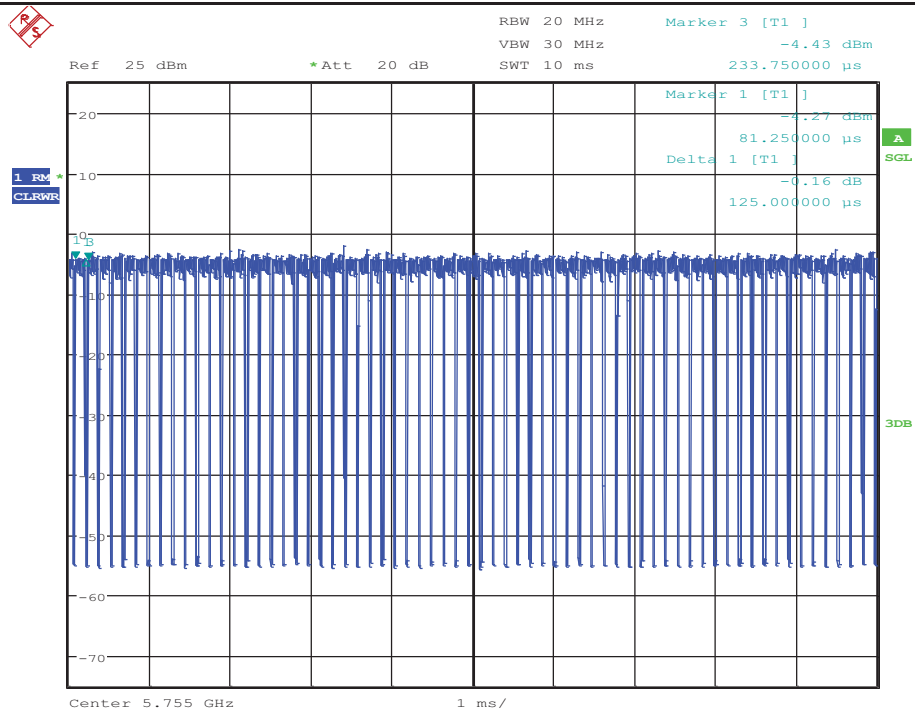
Date: 27.JUN.2017 10:48:34

Duty Cycle_11N40MIMO_5670_Ant2



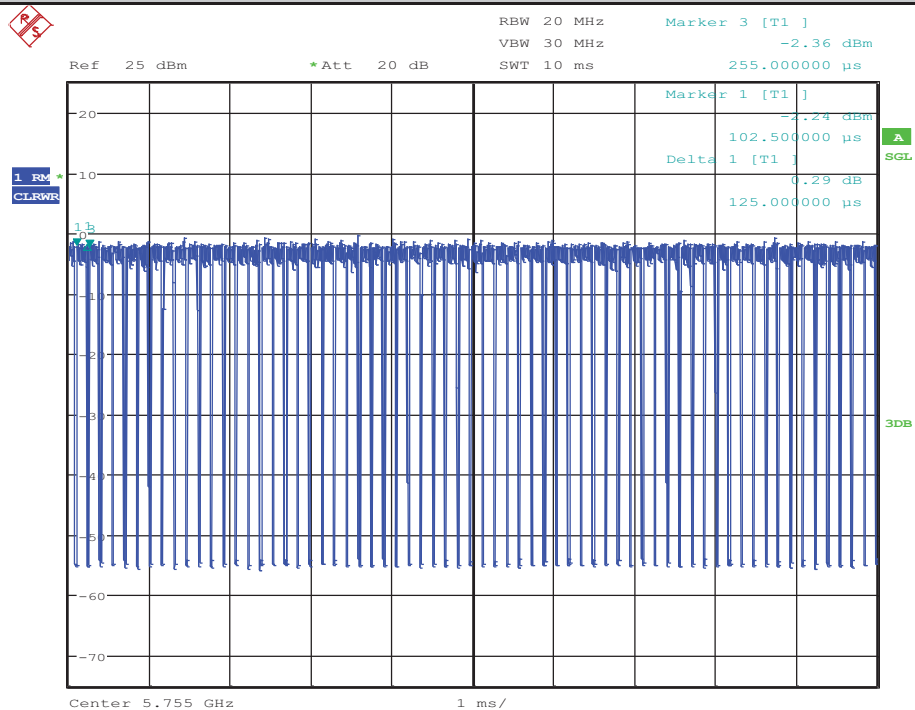
Date: 27.JUN.2017 10:50:53

Duty Cycle_11N40MIMO_5755_Ant1



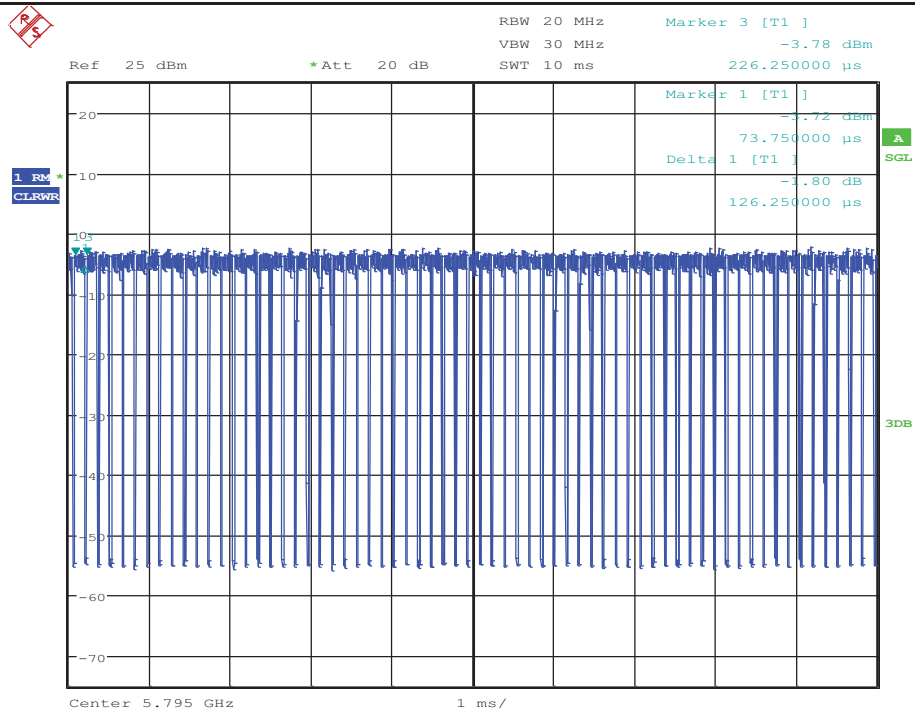
Date: 27.JUN.2017 10:54:28

Duty Cycle_11N40MIMO_5755_Ant2



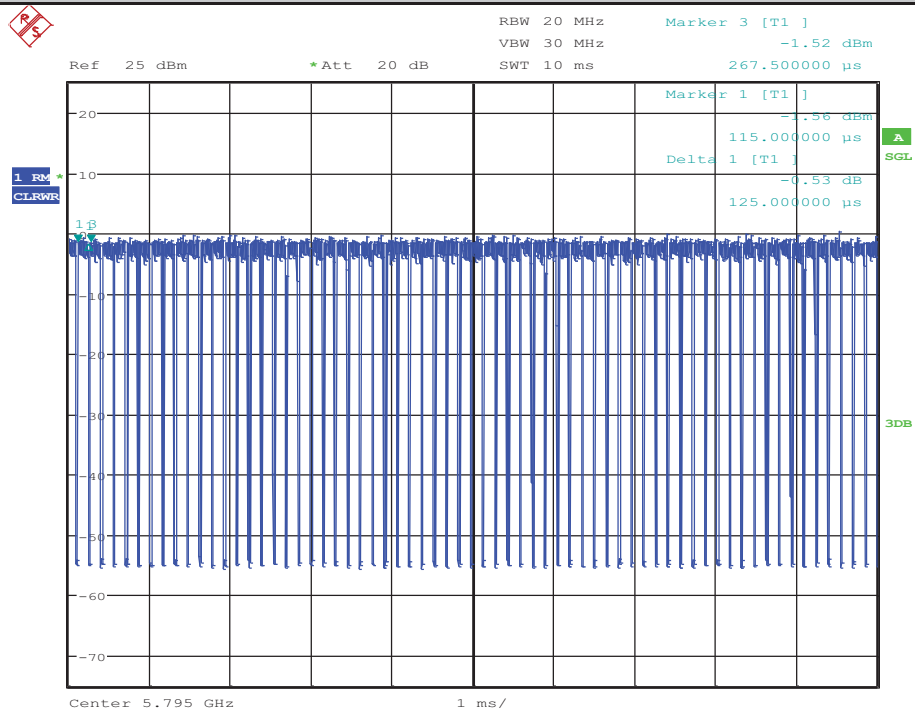
Date: 27.JUN.2017 10:56:47

Duty Cycle_11N40MIMO_5795_Ant1



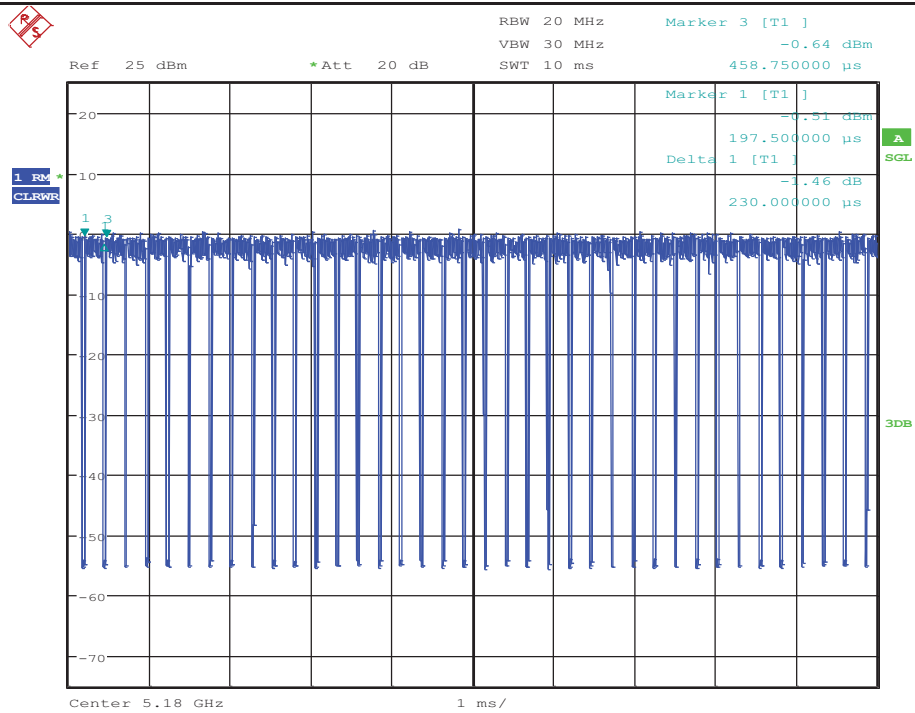
Date: 27.JUN.2017 10:59:54

Duty Cycle_11N40MIMO_5795_Ant2



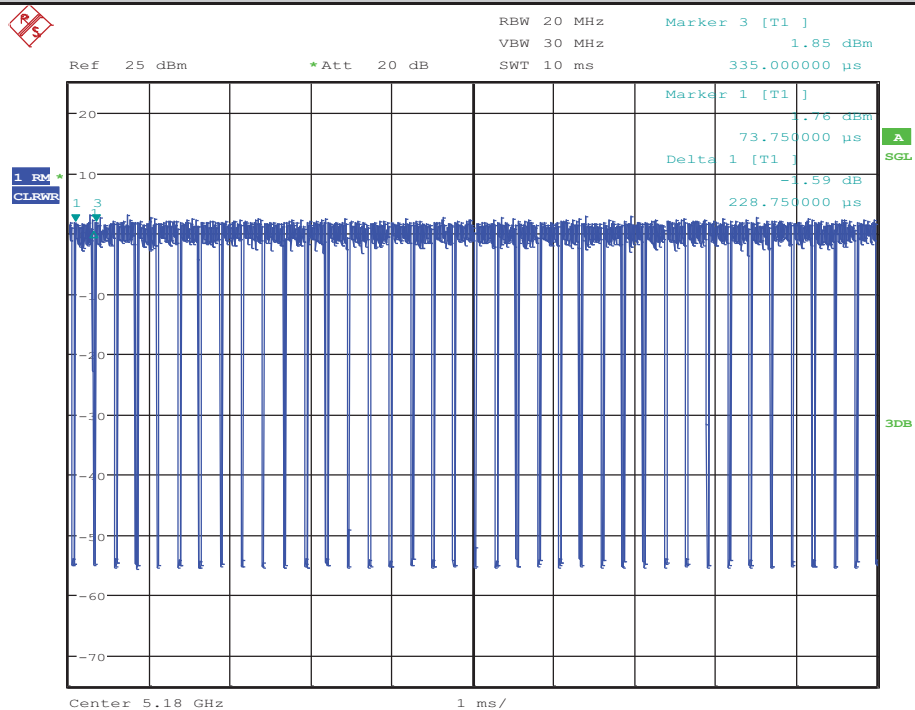
Date: 27.JUN.2017 11:02:13

Duty Cycle_11AC20MIMO_5180_Ant1



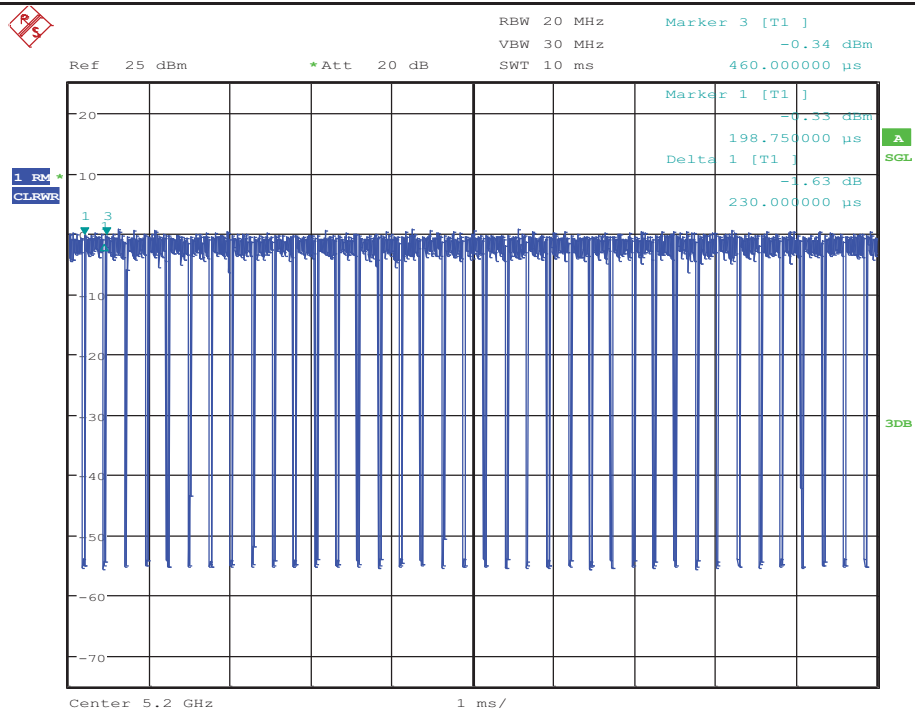
Date: 27.JUN.2017 11:07:05

Duty Cycle_11AC20MIMO_5180_Ant2

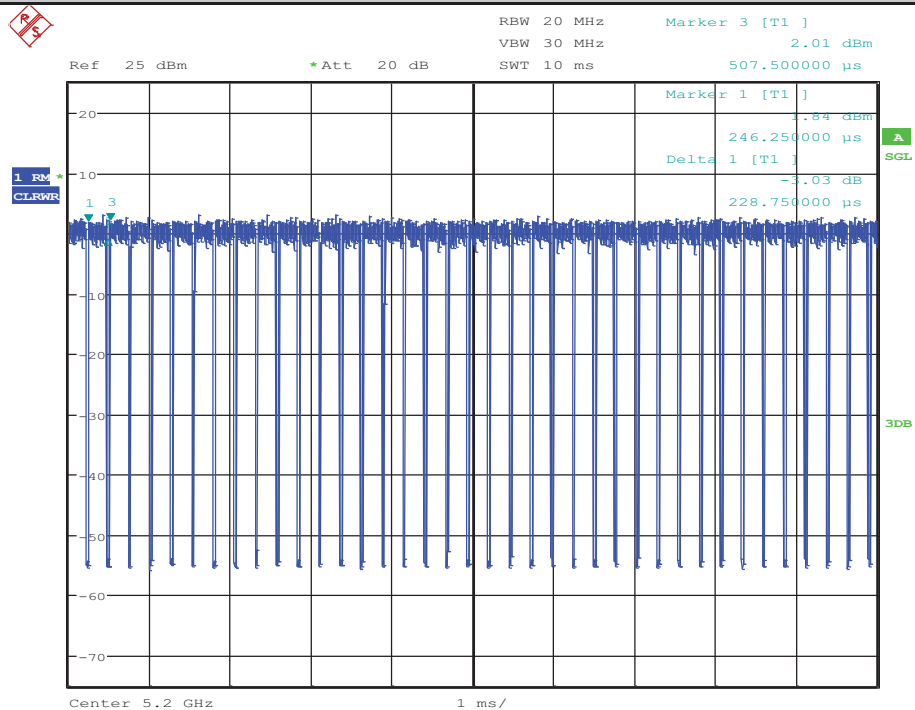


Date: 27.JUN.2017 11:09:56

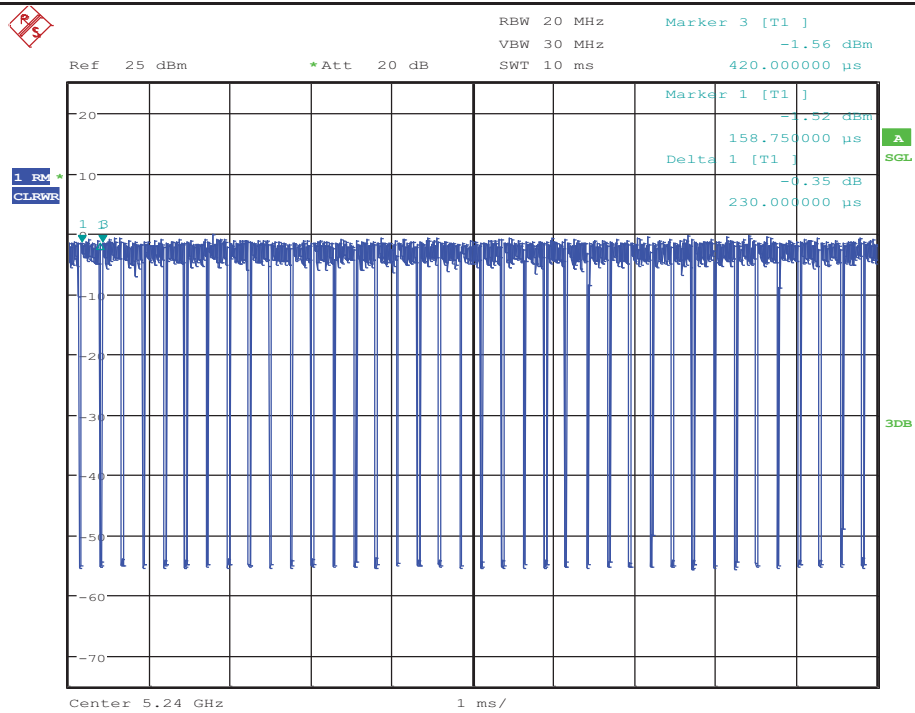
Duty Cycle_11AC20MIMO_5200_Ant1



Duty Cycle_11AC20MIMO_5200_Ant2

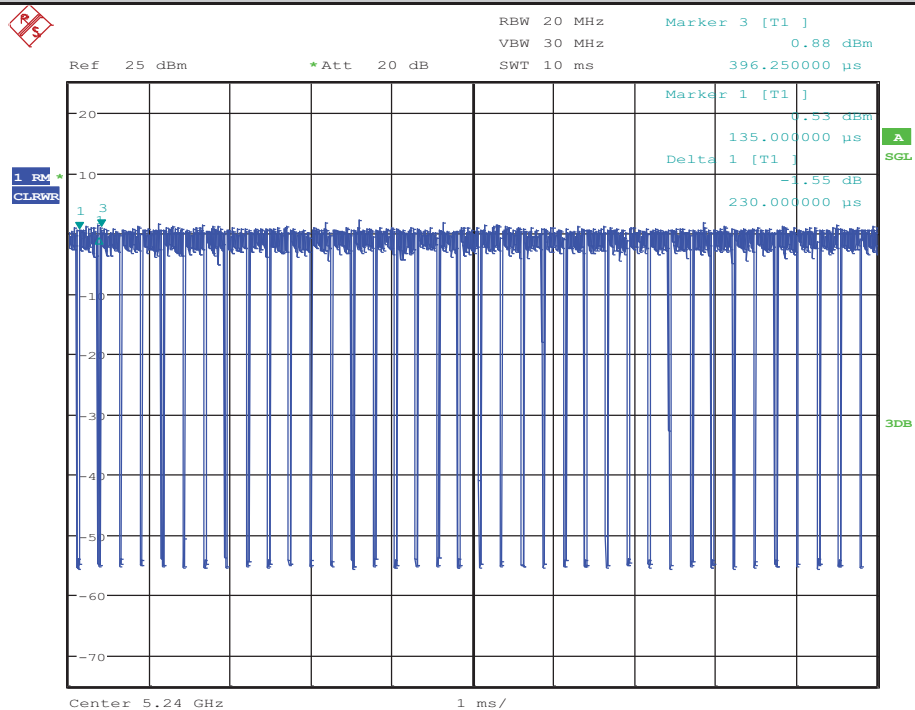


Duty Cycle_11AC20MIMO_5240_Ant1



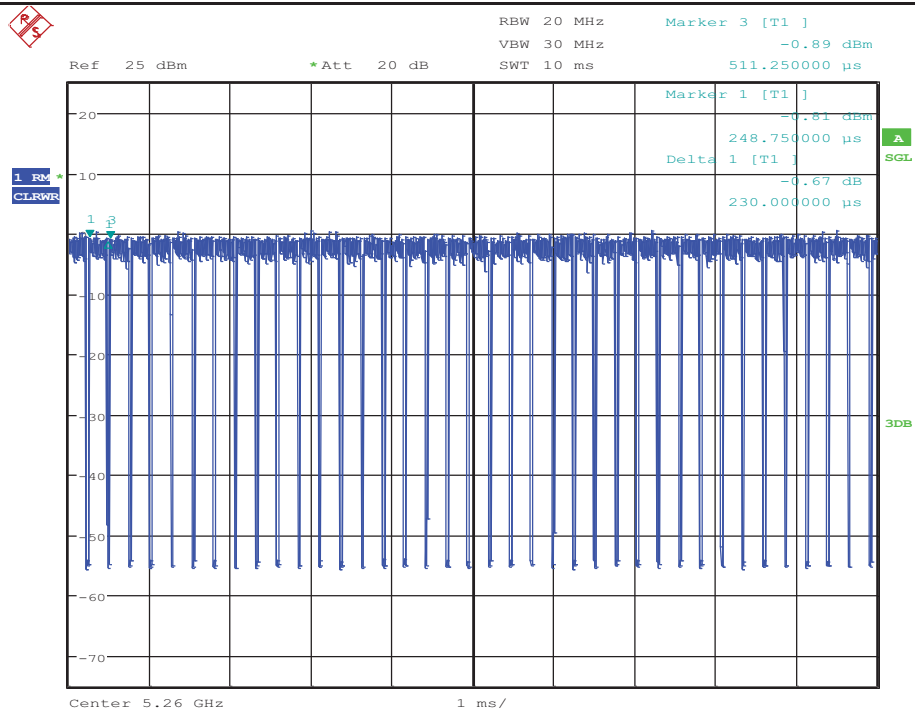
Date: 27.JUN.2017 11:20:42

Duty Cycle_11AC20MIMO_5240_Ant2



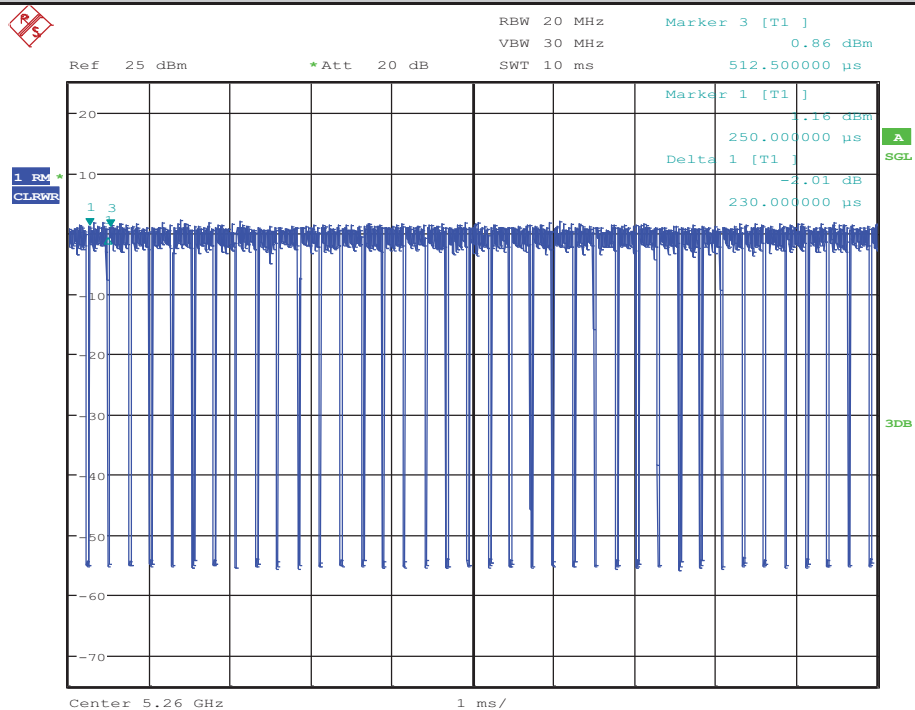
Date: 27.JUN.2017 11:23:33

Duty Cycle_11AC20MIMO_5260_Ant1



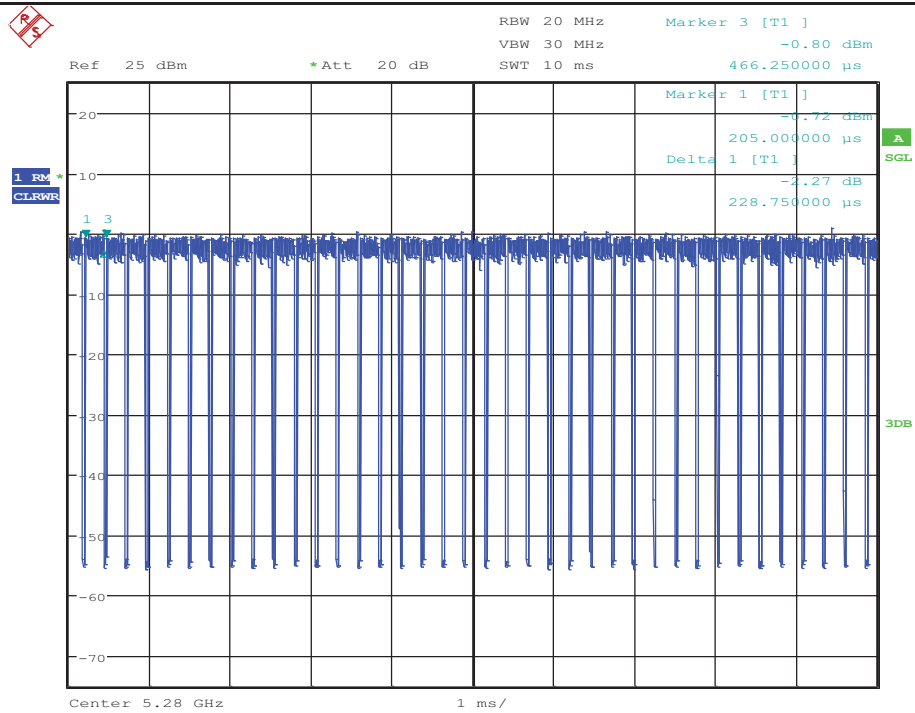
Date: 27.JUN.2017 11:27:20

Duty Cycle_11AC20MIMO_5260_Ant2



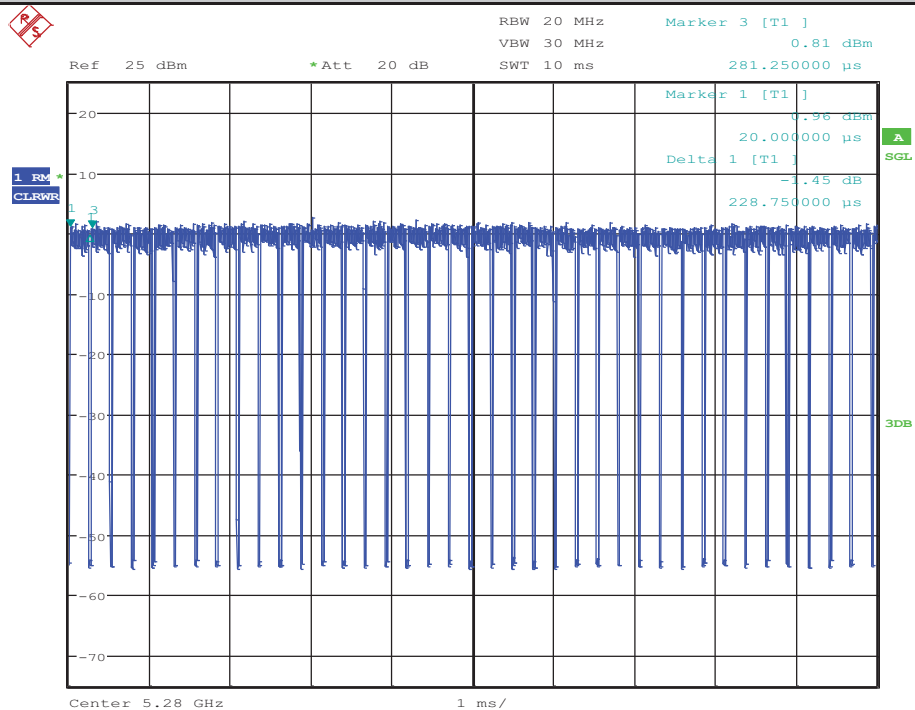
Date: 27.JUN.2017 11:30:12

Duty Cycle_11AC20MIMO_5280_Ant1



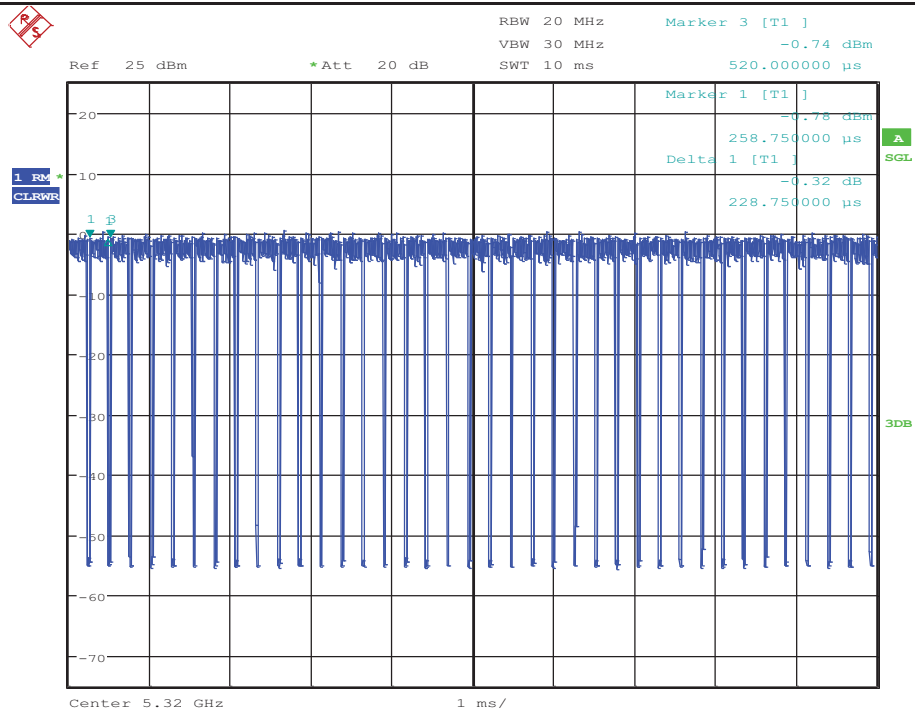
Date: 27.JUN.2017 11:34:22

Duty Cycle_11AC20MIMO_5280_Ant2



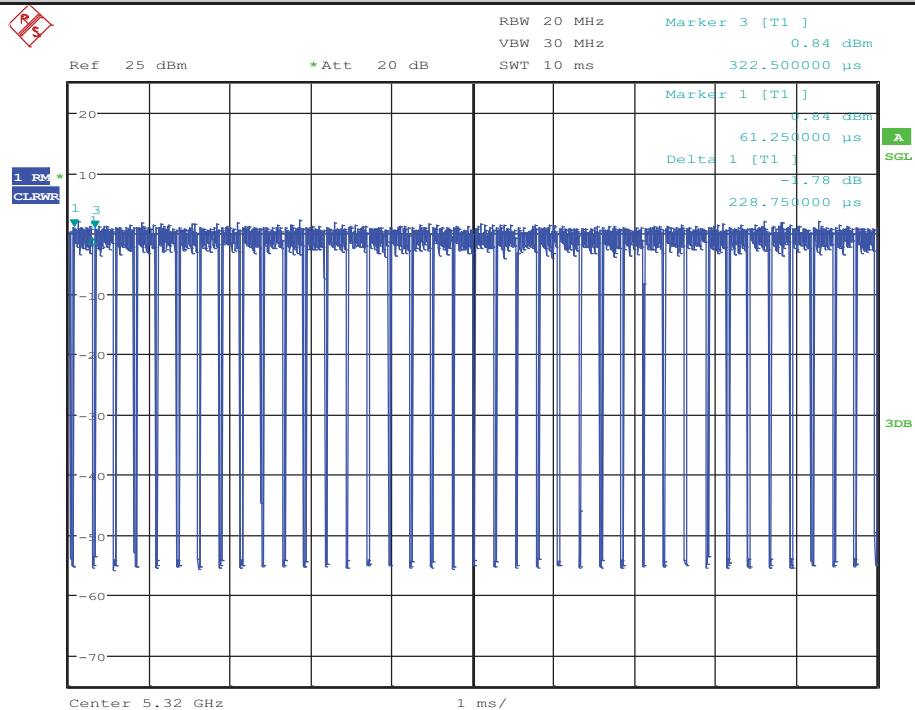
Date: 27.JUN.2017 11:37:13

Duty Cycle_11AC20MIMO_5320_Ant1



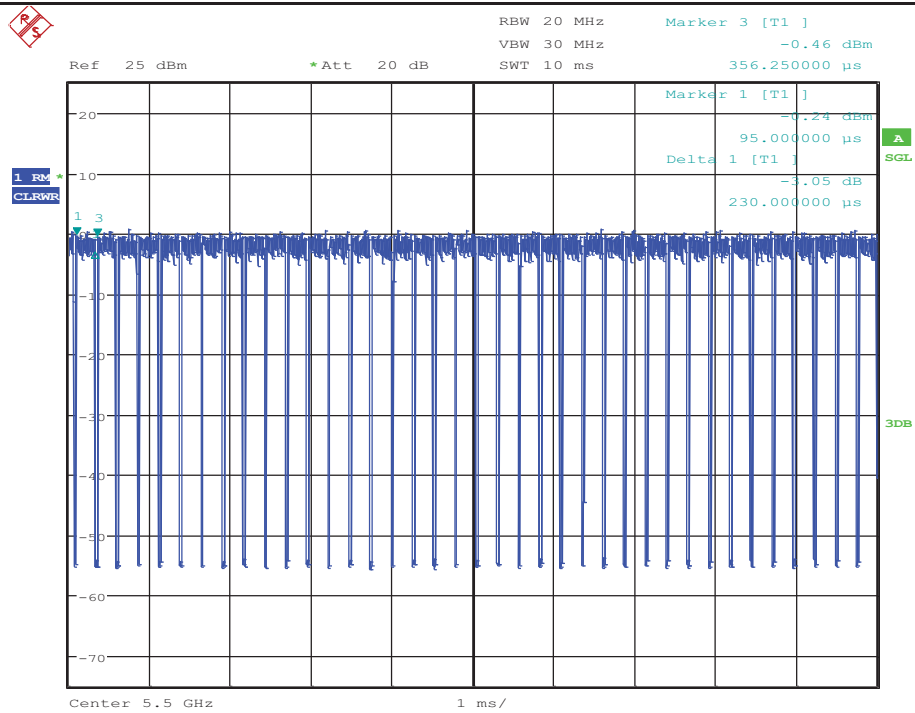
Date: 27.JUN.2017 11:40:48

Duty Cycle_11AC20MIMO_5320_Ant2



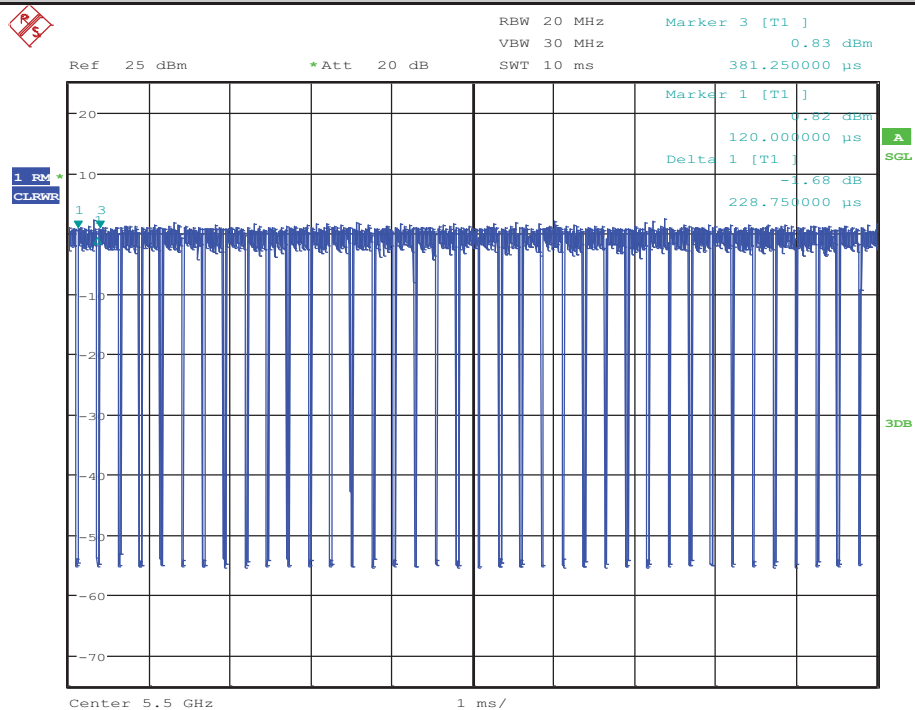
Date: 27.JUN.2017 11:43:39

Duty Cycle_11AC20MIMO_5500_Ant1



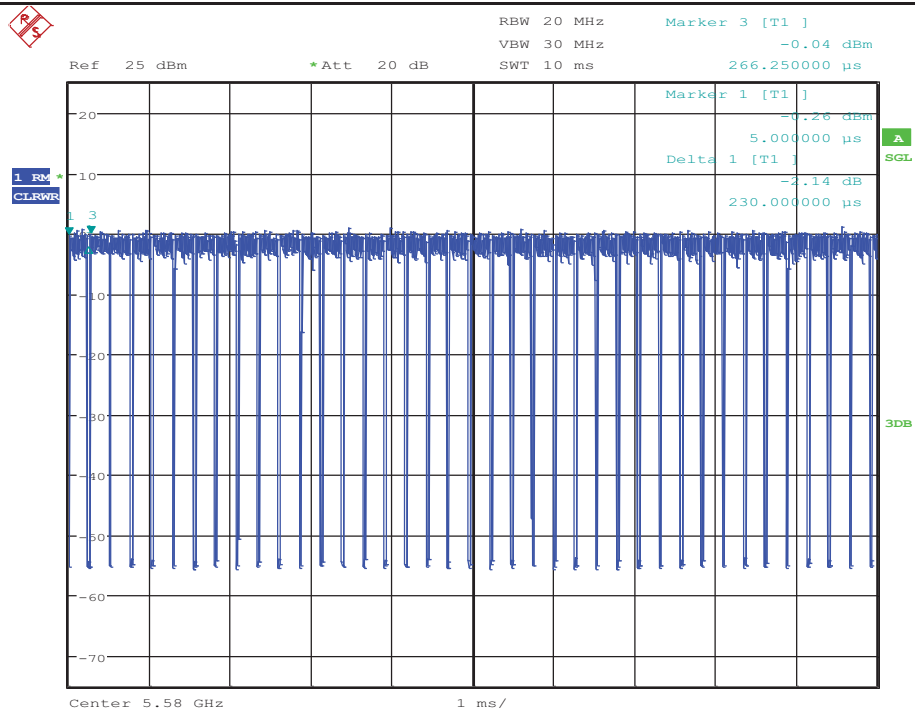
Date: 27.JUN.2017 11:47:35

Duty Cycle_11AC20MIMO_5500_Ant2

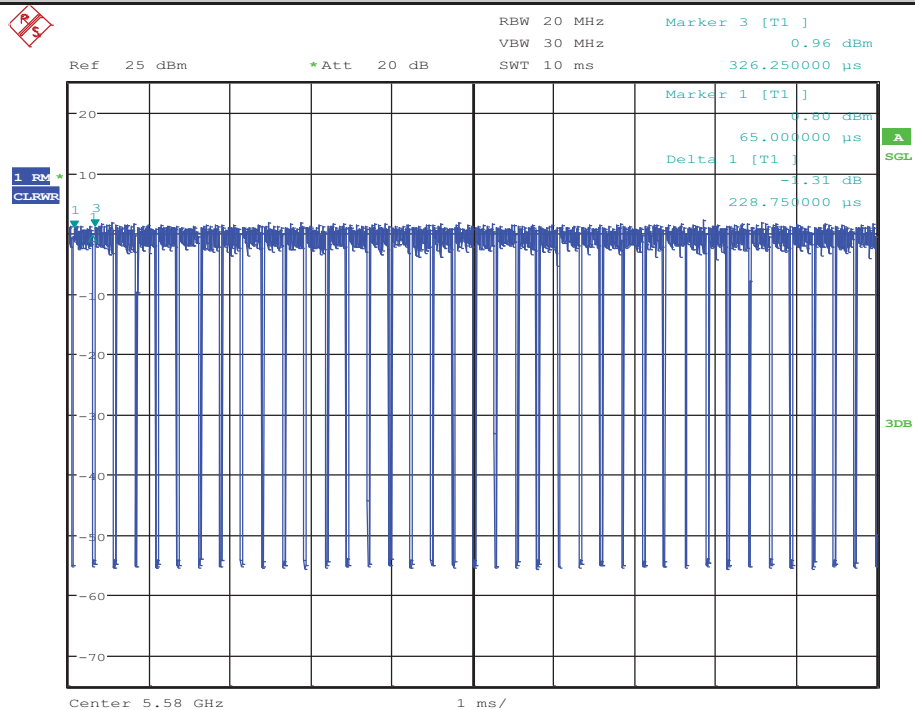


Date: 27.JUN.2017 11:50:26

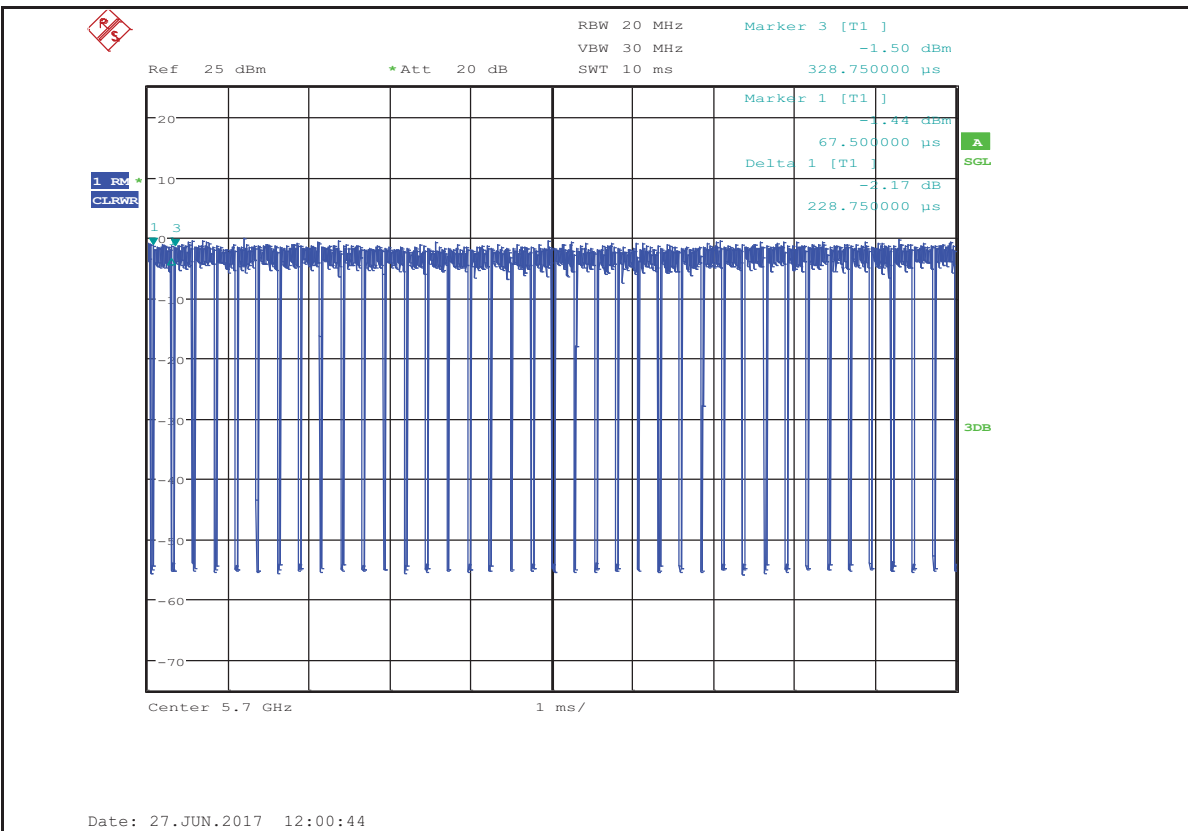
Duty Cycle_11AC20MIMO_5580_Ant1



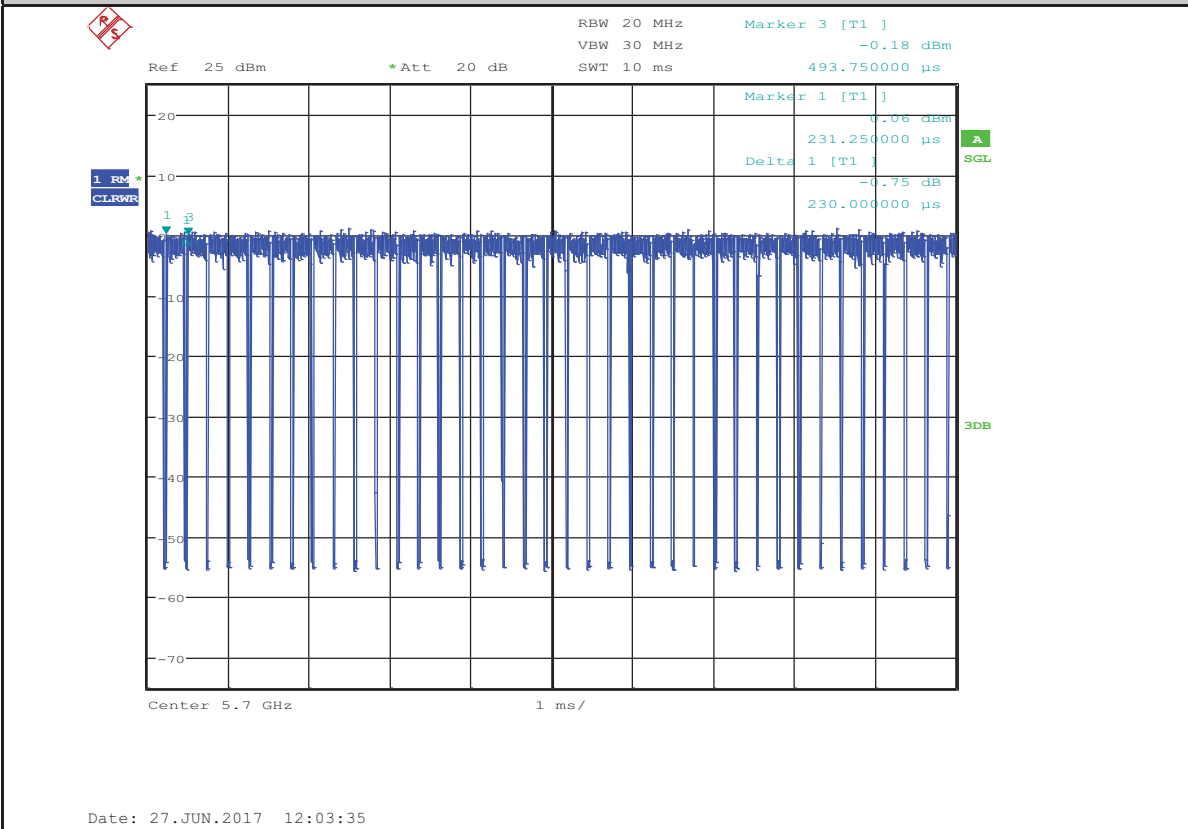
Duty Cycle_11AC20MIMO_5580_Ant2



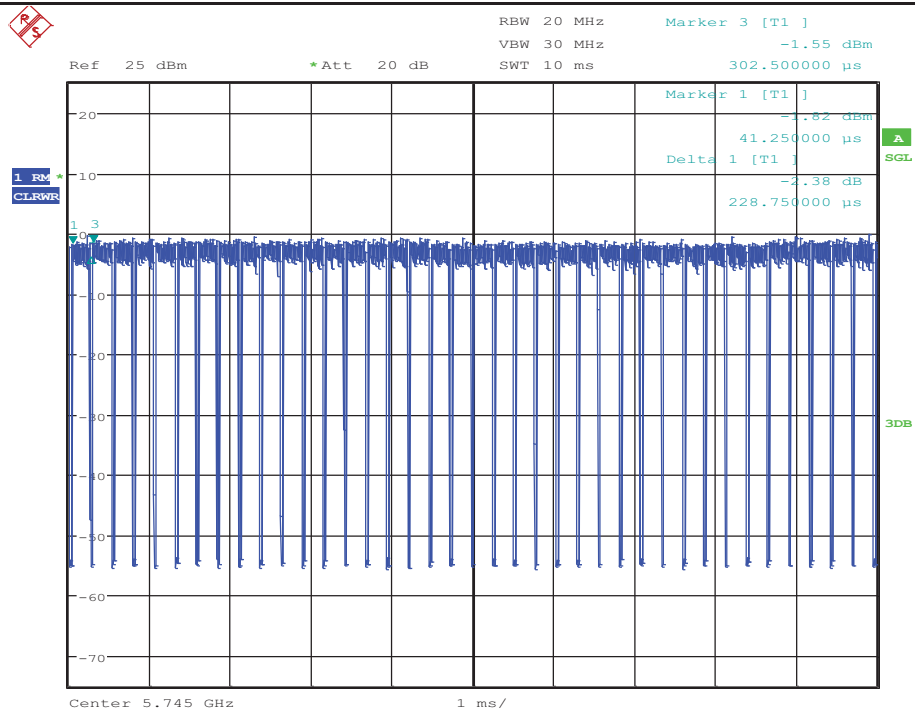
Duty Cycle_11AC20MIMO_5700_Ant1



Duty Cycle_11AC20MIMO_5700_Ant2

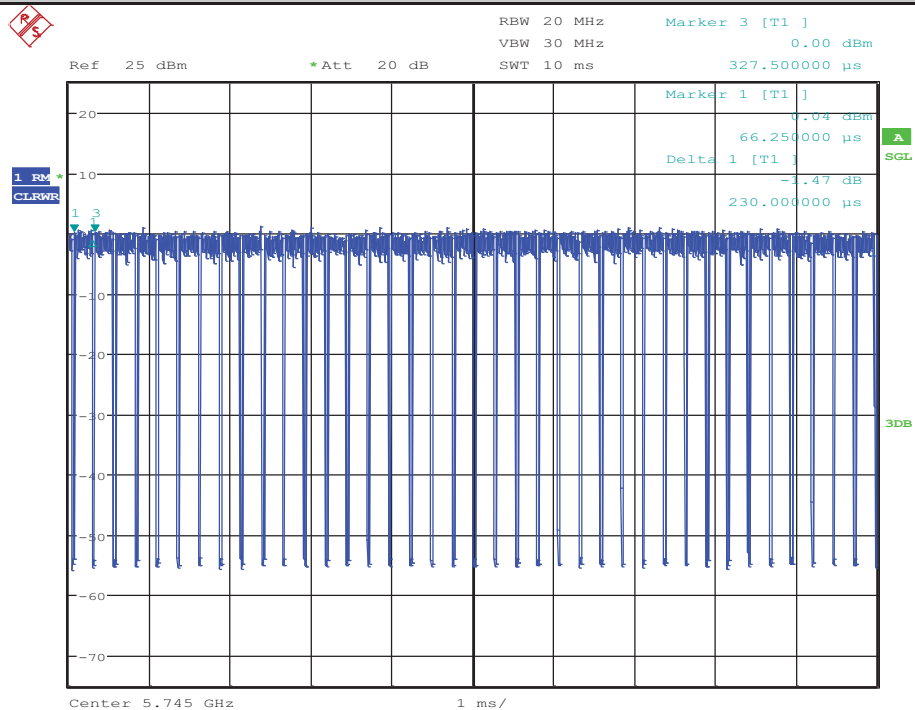


Duty Cycle_11AC20MIMO_5745_Ant1



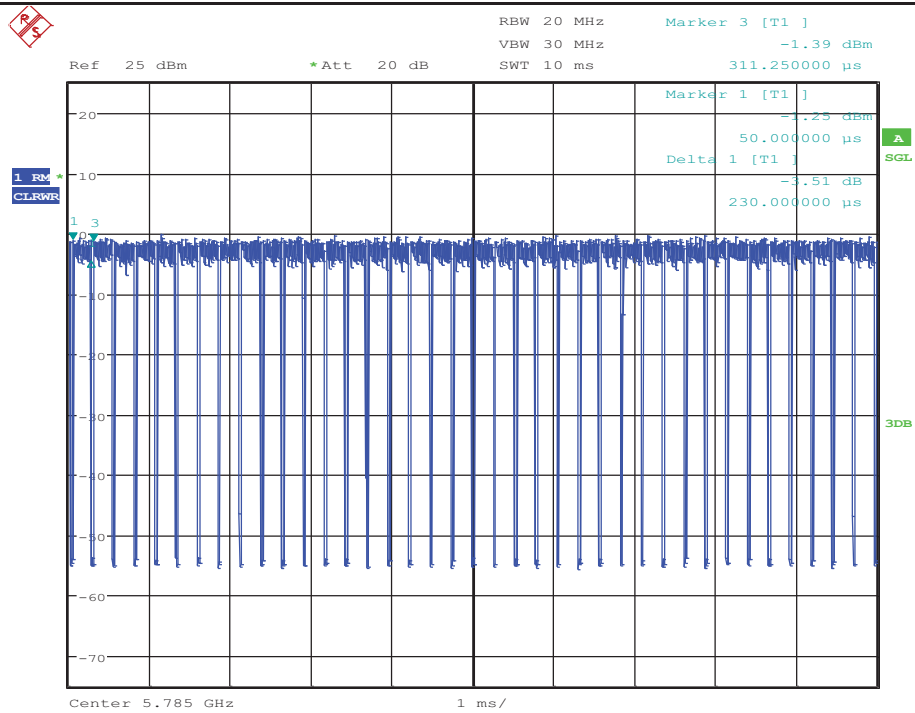
Date: 27.JUN.2017 12:07:26

Duty Cycle_11AC20MIMO_5745_Ant2



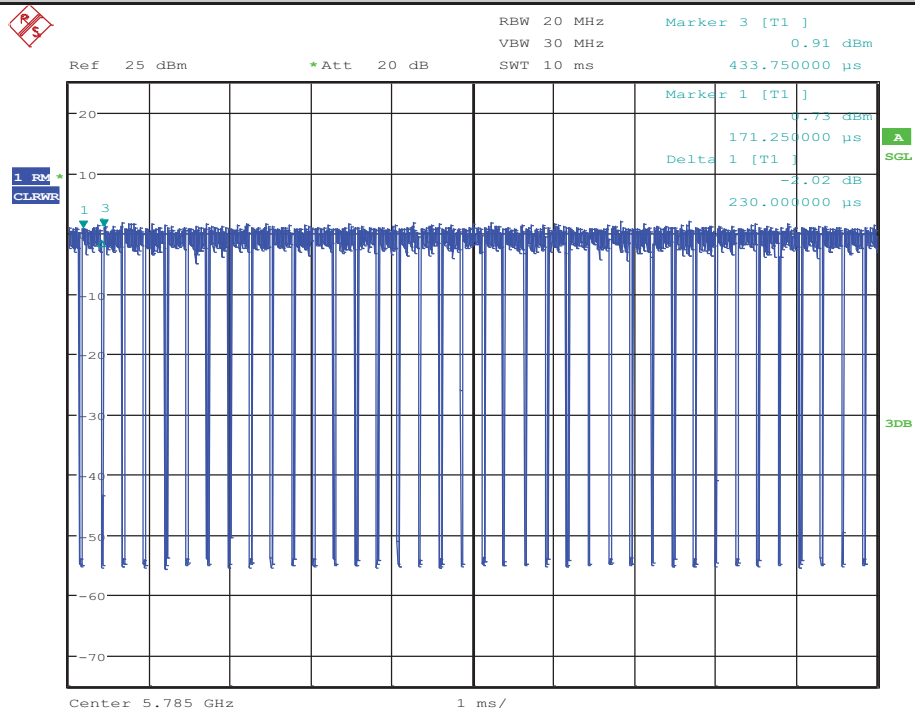
Date: 27.JUN.2017 12:09:21

Duty Cycle_11AC20MIMO_5785_Ant1



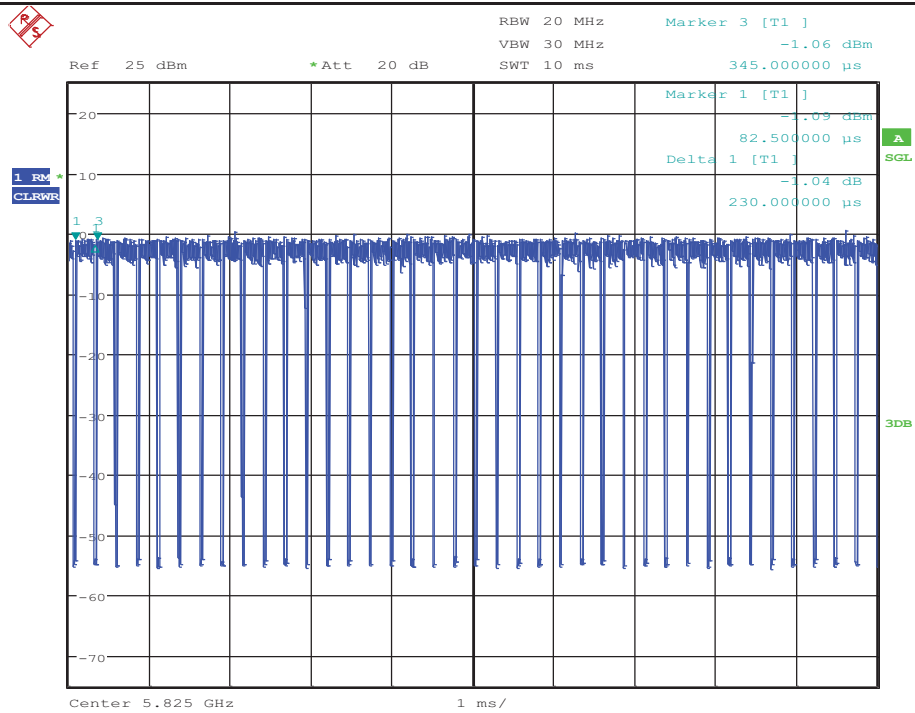
Date: 27.JUN.2017 12:13:21

Duty Cycle_11AC20MIMO_5785_Ant2



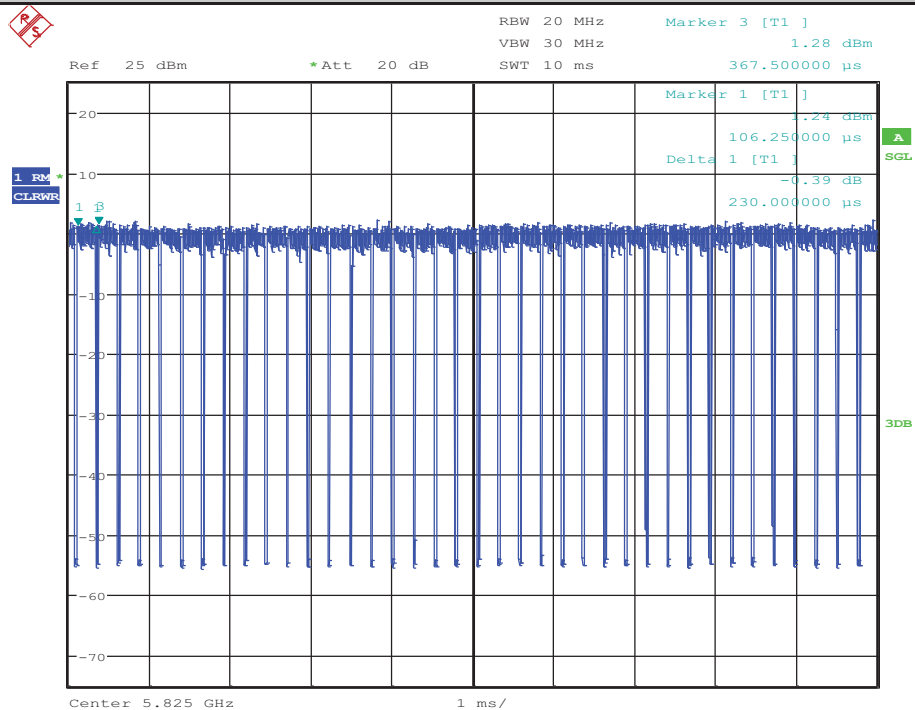
Date: 27.JUN.2017 12:15:16

Duty Cycle_11AC20MIMO_5825_Ant1



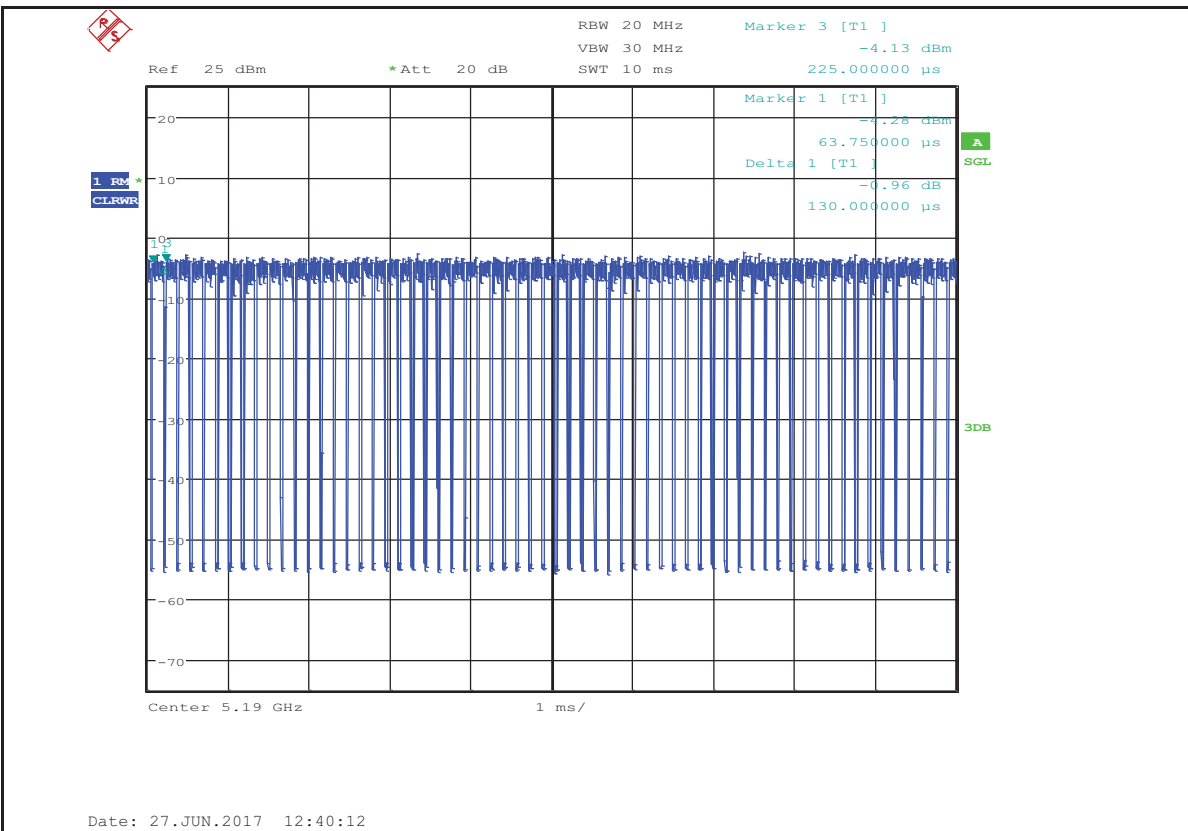
Date: 27.JUN.2017 12:18:40

Duty Cycle_11AC20MIMO_5825_Ant2

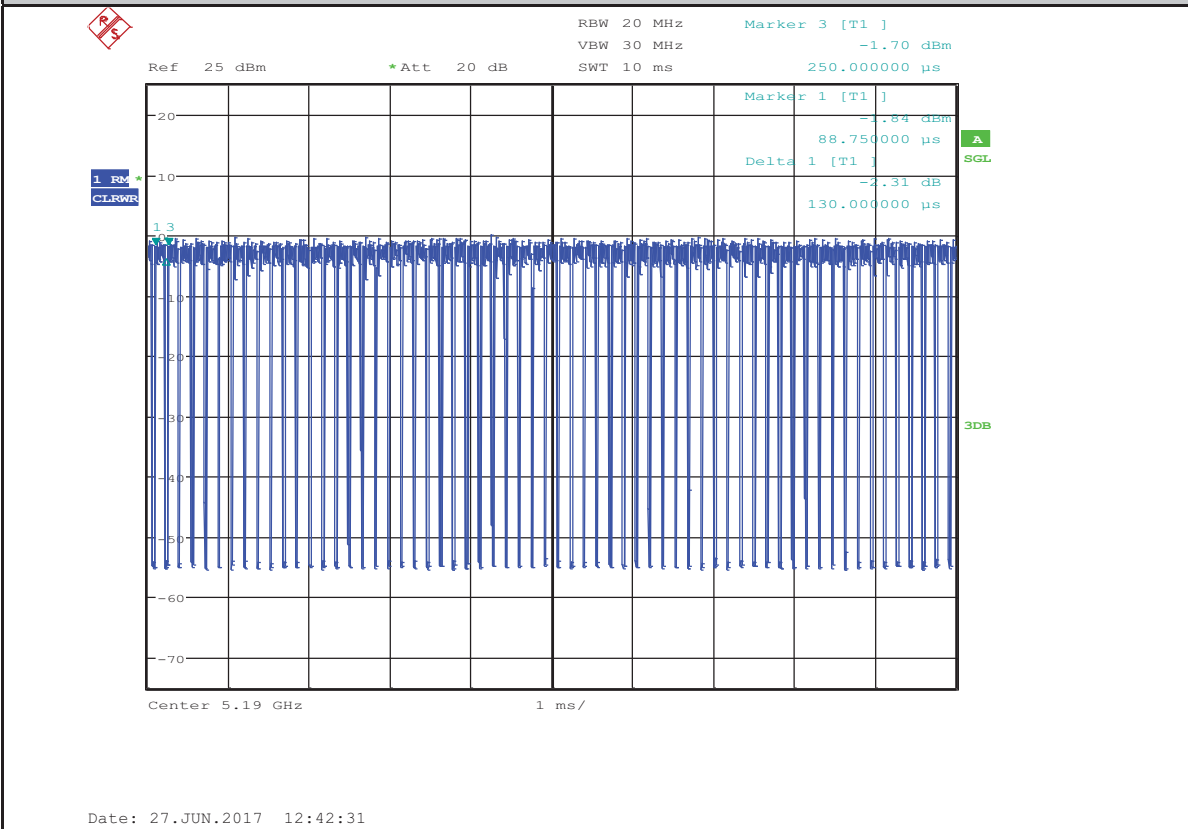


Date: 27.JUN.2017 12:20:35

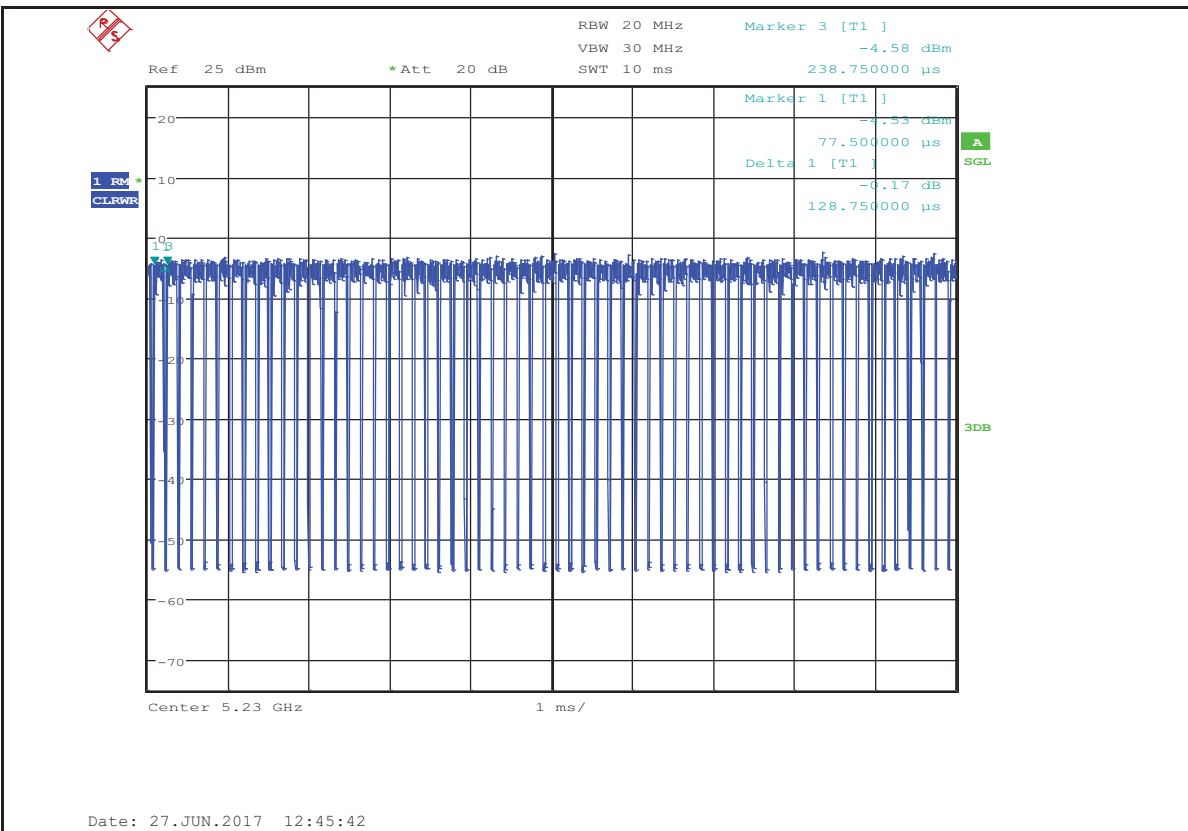
Duty Cycle_11AC40MIMO_5190_Ant1



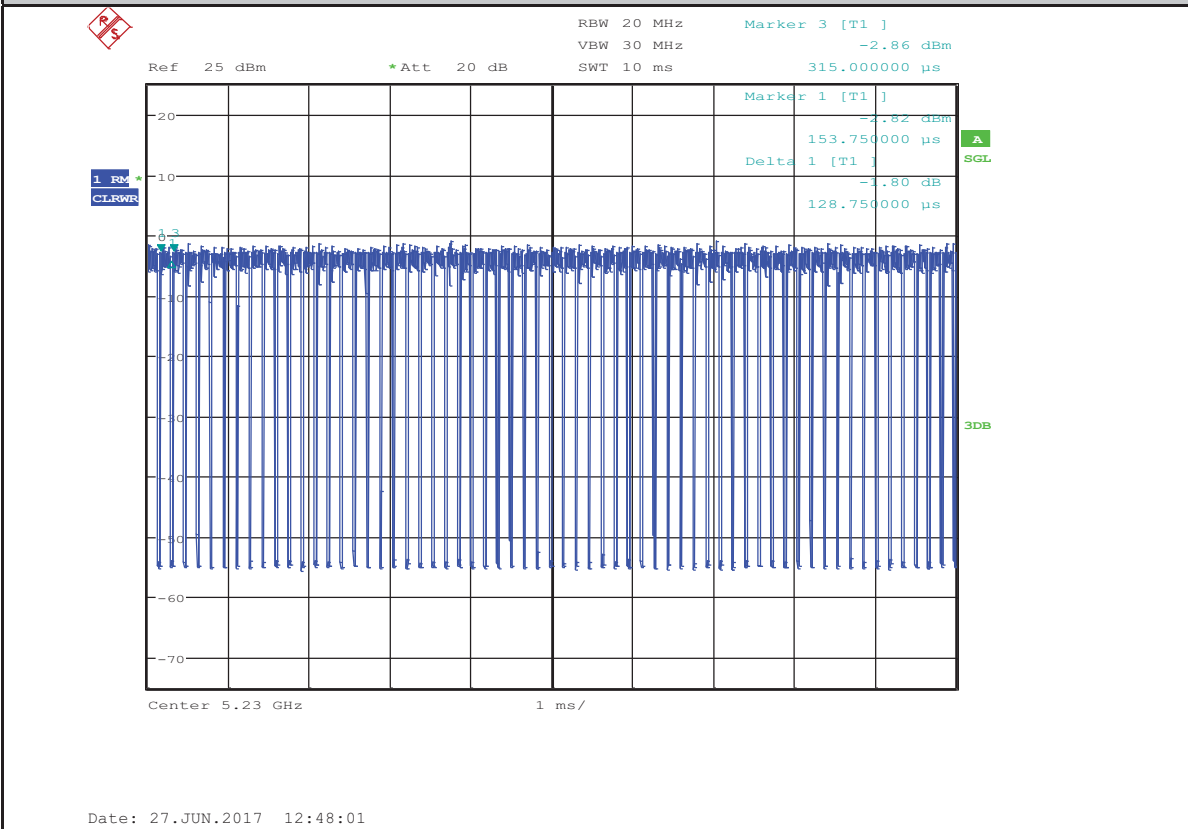
Duty Cycle_11AC40MIMO_5190_Ant2



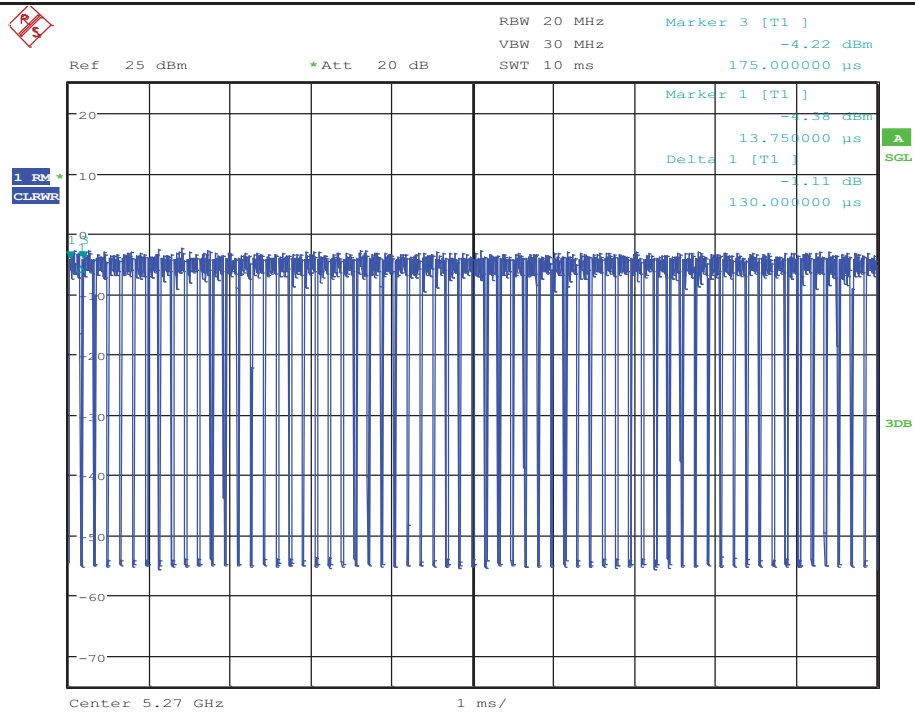
Duty Cycle_11AC40MIMO_5230_Ant1



Duty Cycle_11AC40MIMO_5230_Ant2

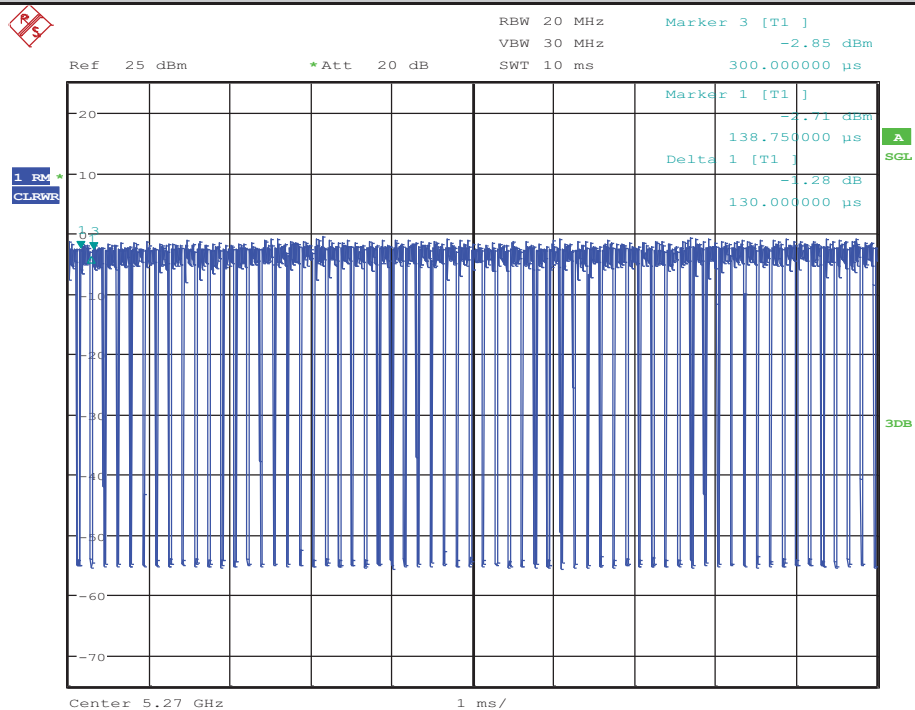


Duty Cycle_11AC40MIMO_5270_Ant1



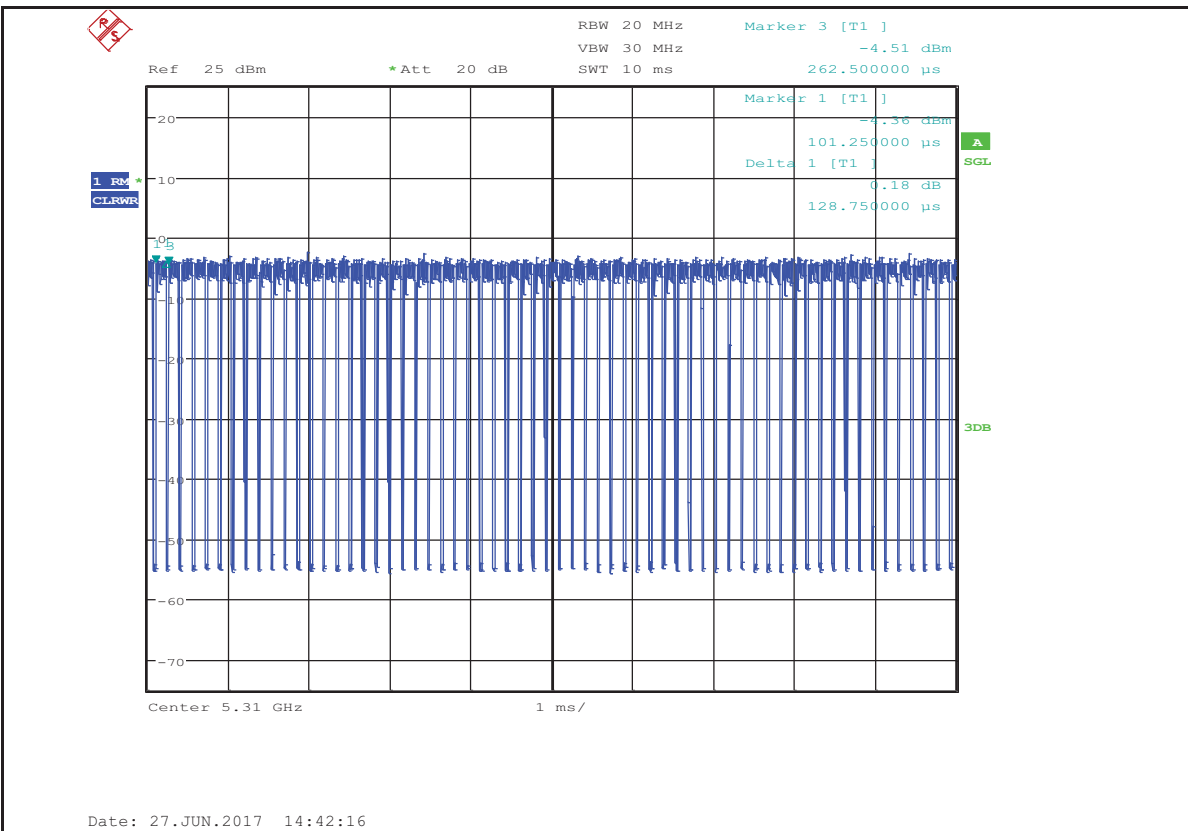
Date: 27.JUN.2017 14:36:38

Duty Cycle_11AC40MIMO_5270_Ant2

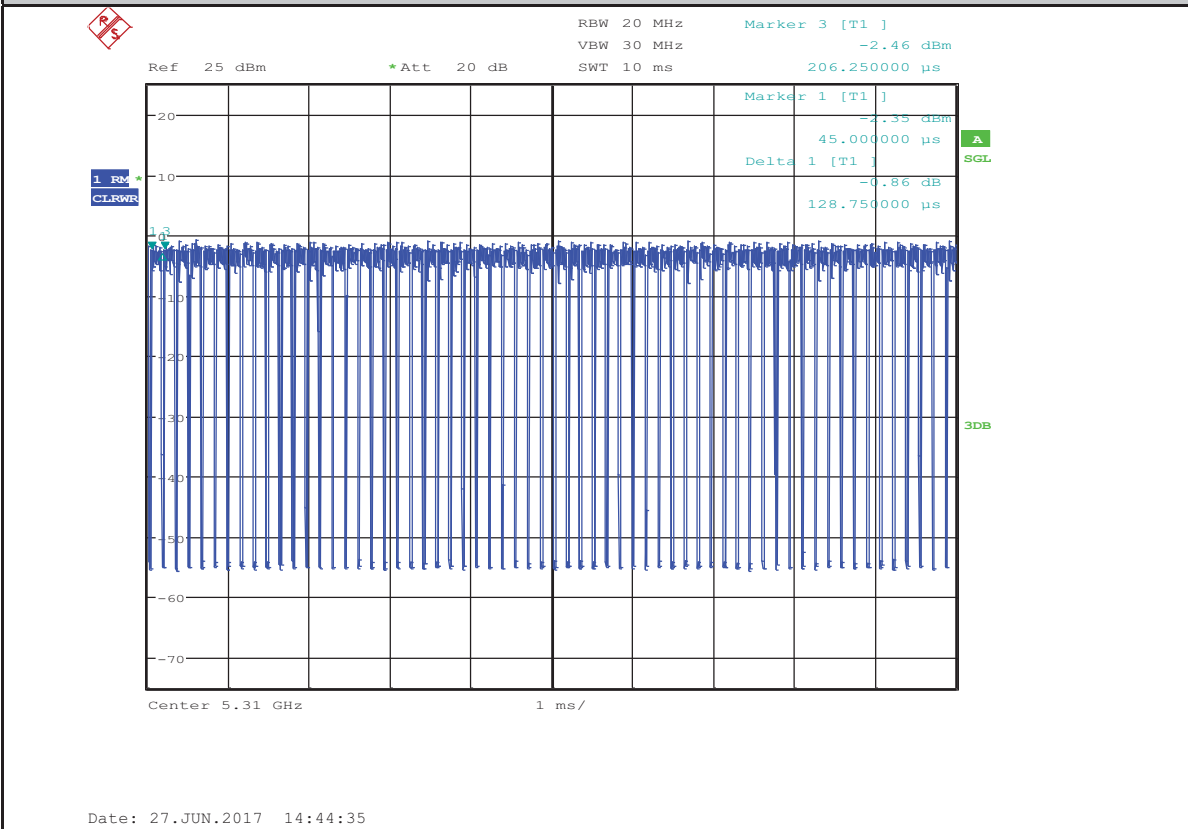


Date: 27.JUN.2017 14:38:58

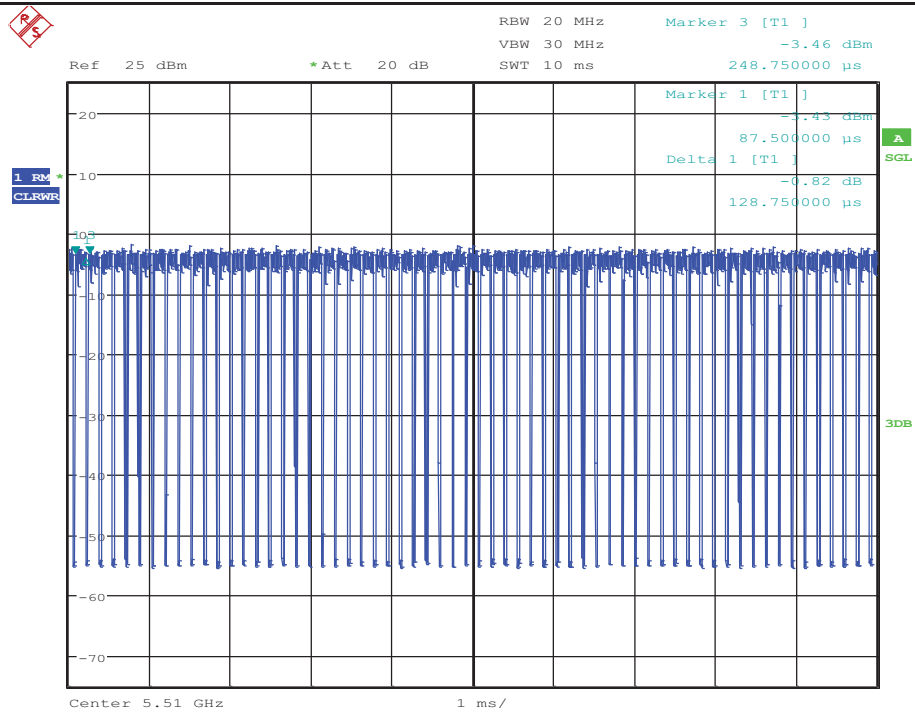
Duty Cycle_11AC40MIMO_5310_Ant1



Duty Cycle_11AC40MIMO_5310_Ant2

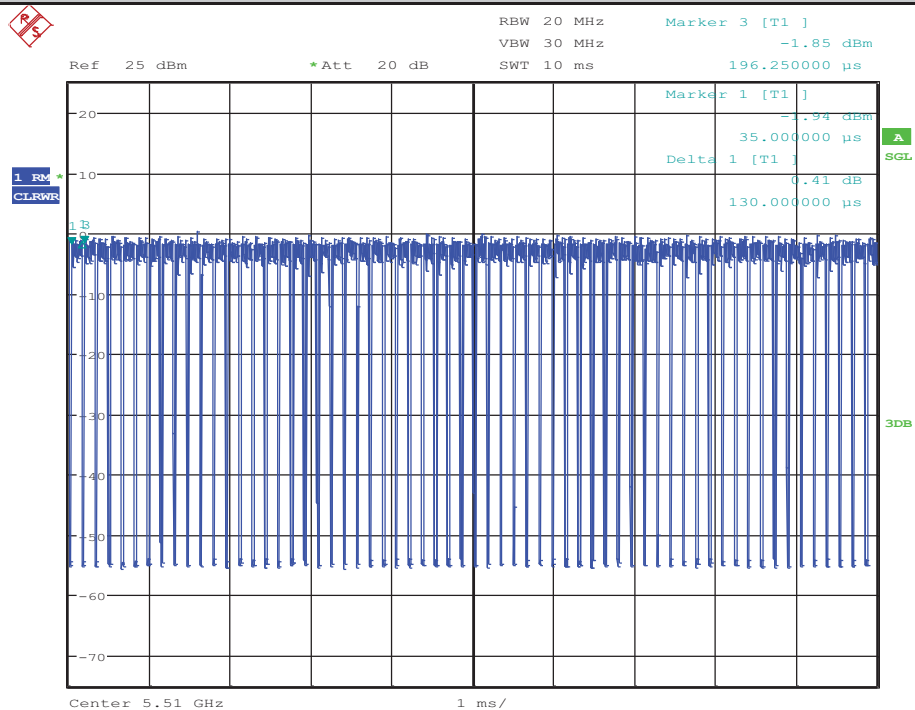


Duty Cycle_11AC40MIMO_5510_Ant1



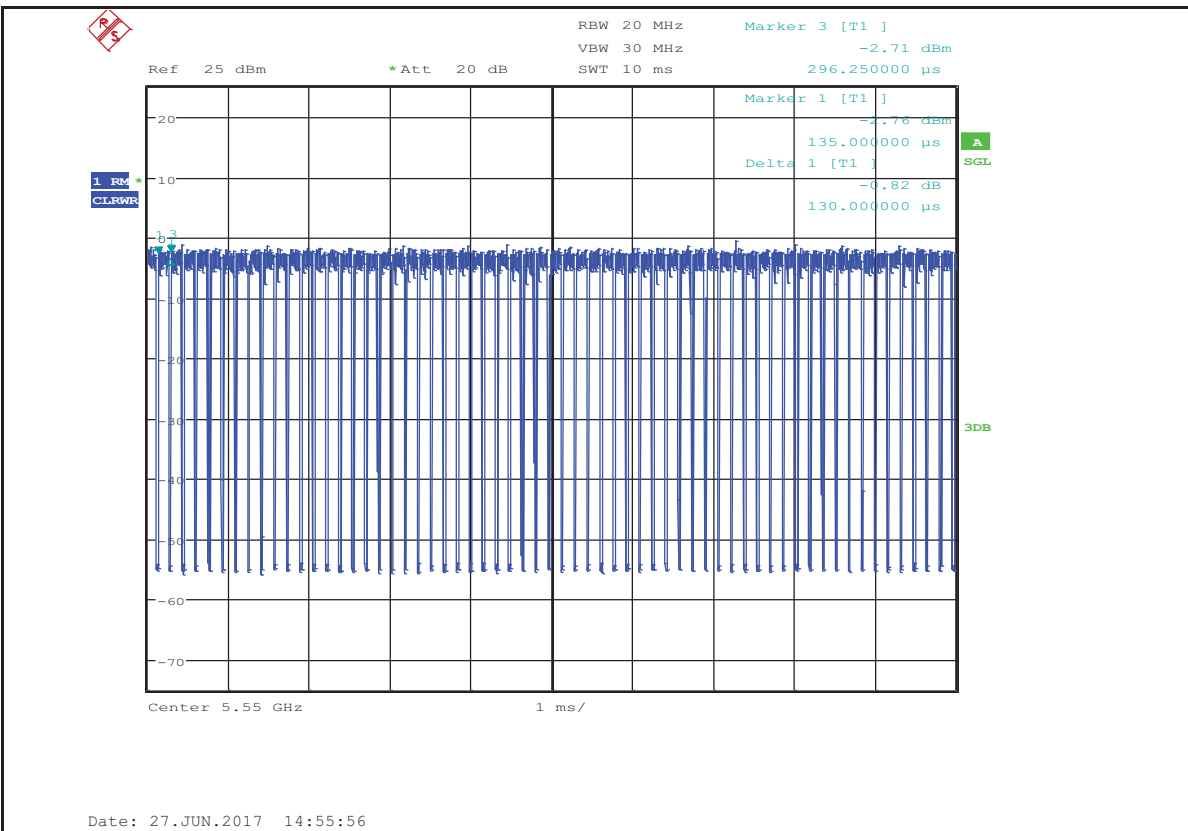
Date: 27.JUN.2017 14:48:23

Duty Cycle_11AC40MIMO_5510_Ant2

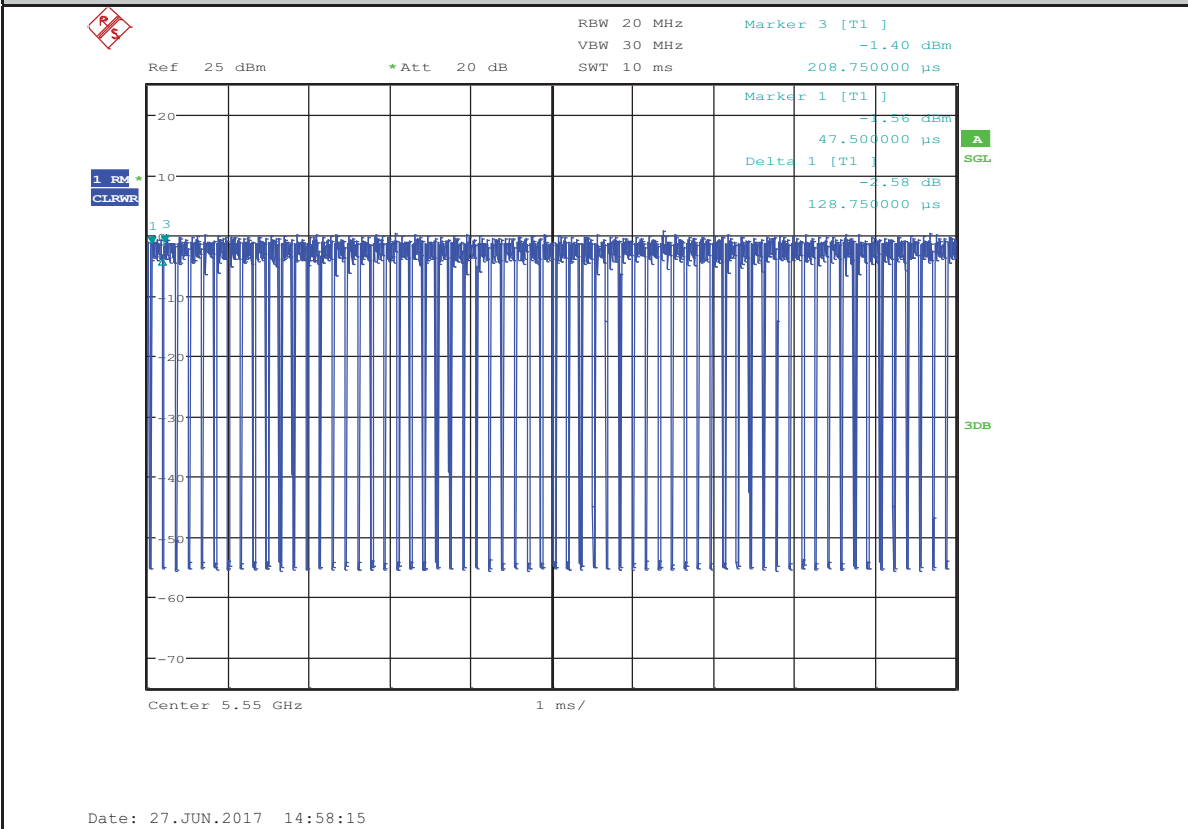


Date: 27.JUN.2017 14:50:42

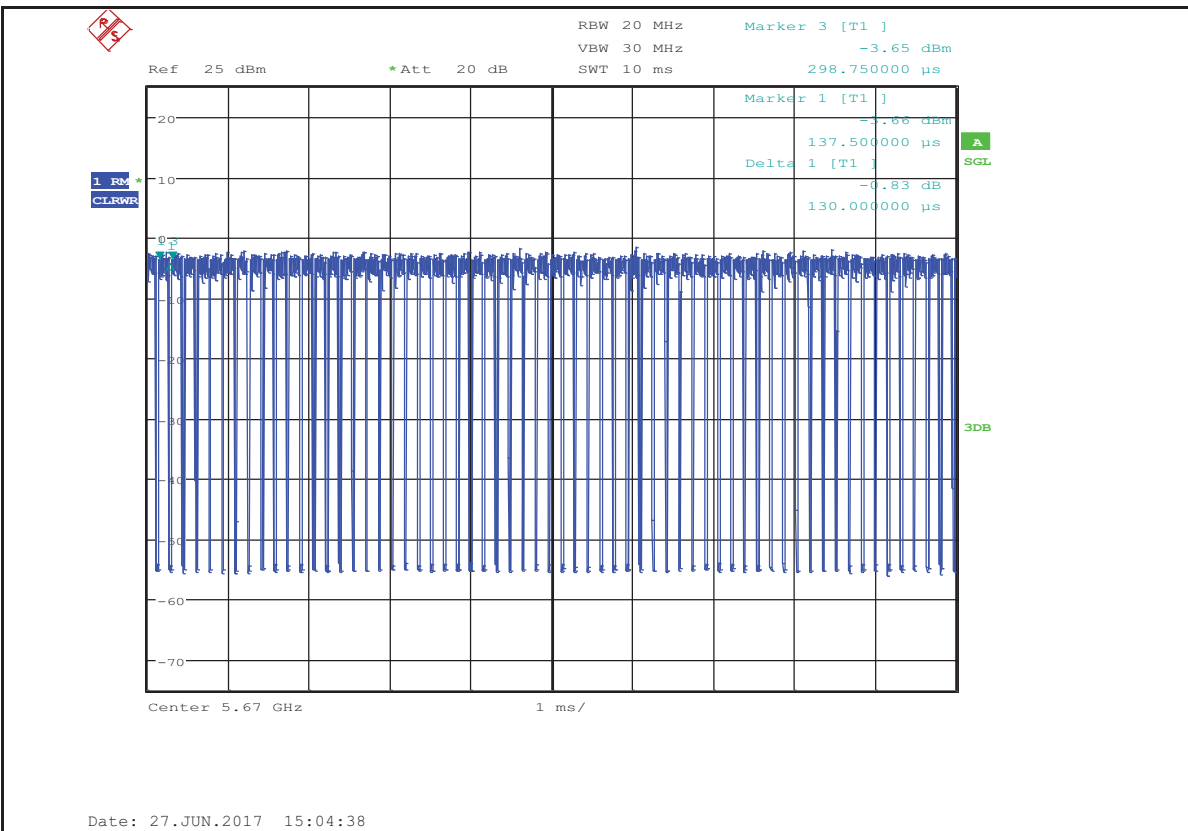
Duty Cycle_11AC40MIMO_5550_Ant1



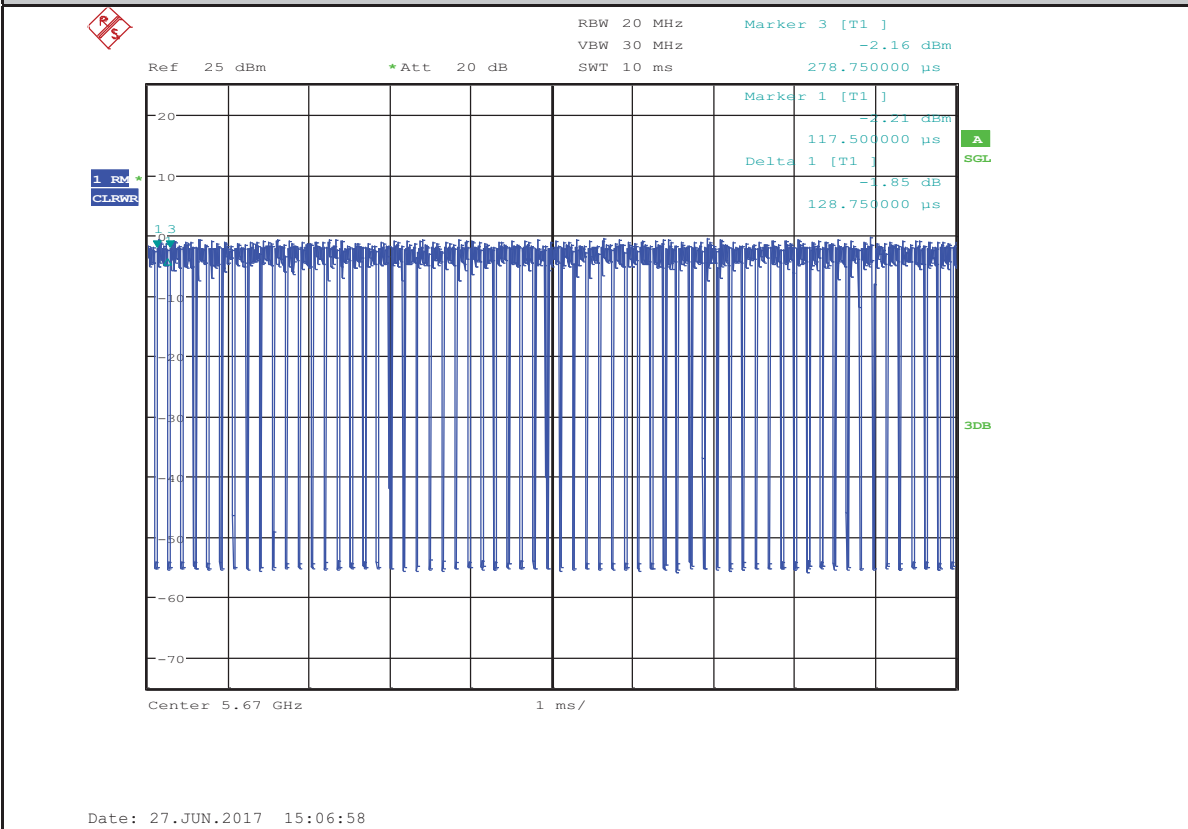
Duty Cycle_11AC40MIMO_5550_Ant2



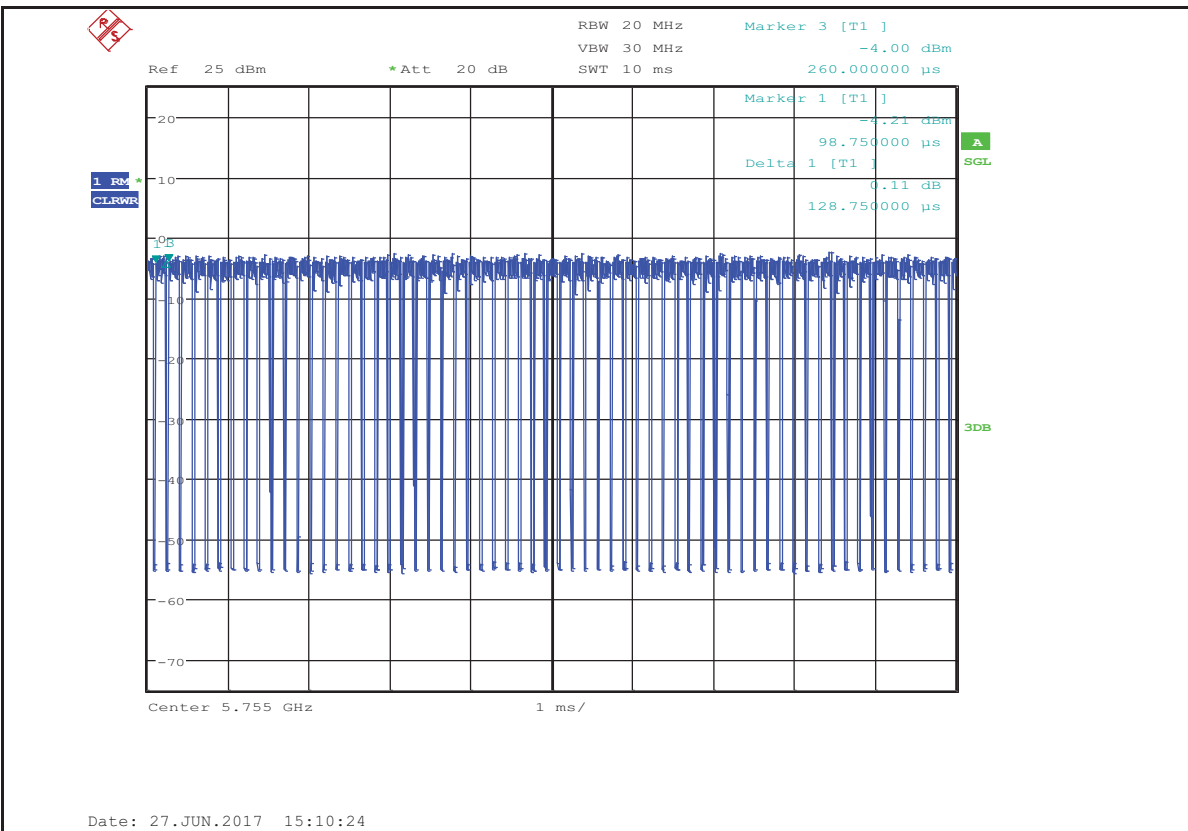
Duty Cycle_11AC40MIMO_5670_Ant1



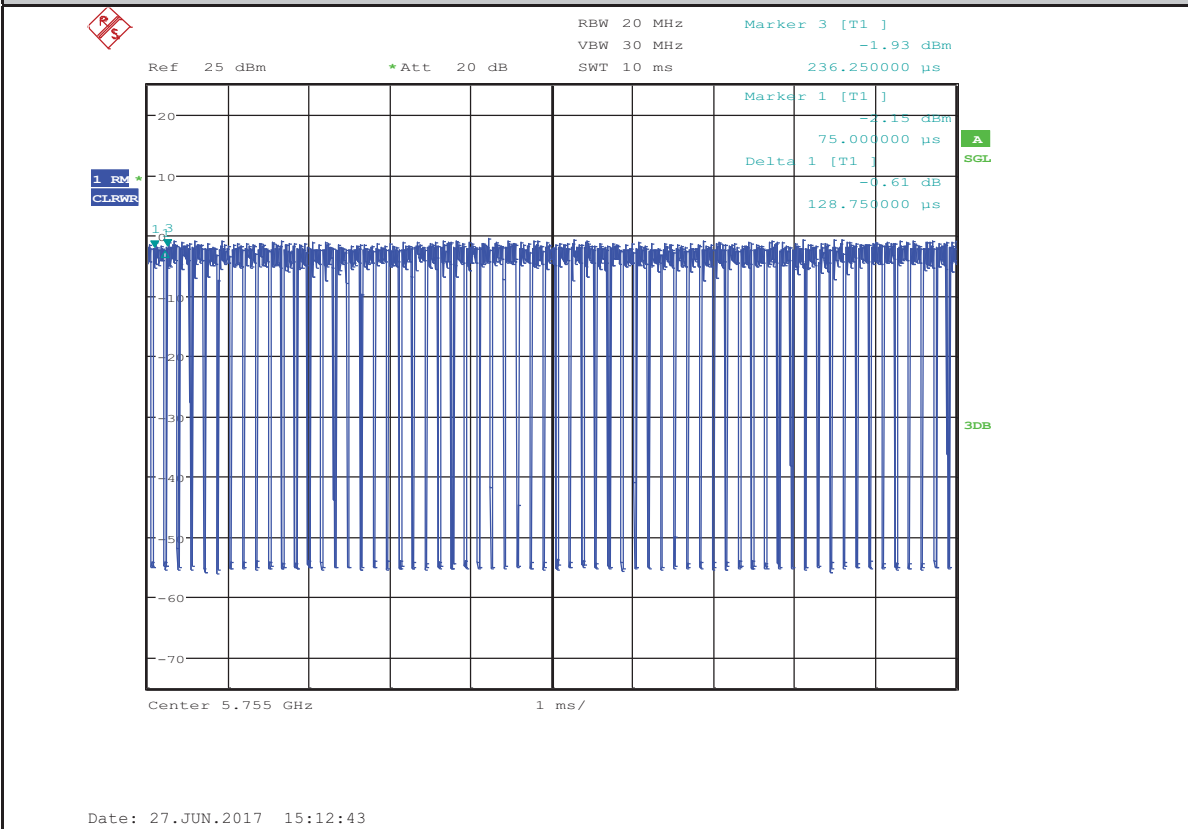
Duty Cycle_11AC40MIMO_5670_Ant2



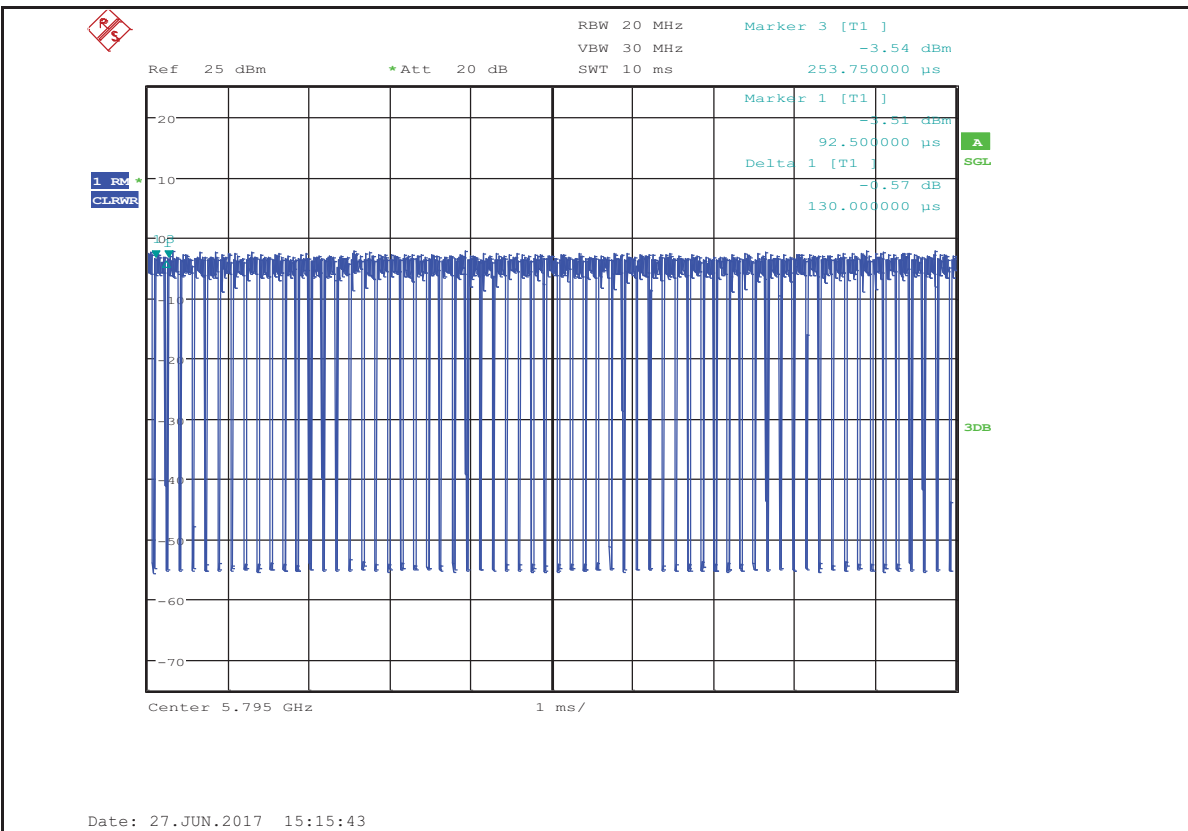
Duty Cycle_11AC40MIMO_5755_Ant1



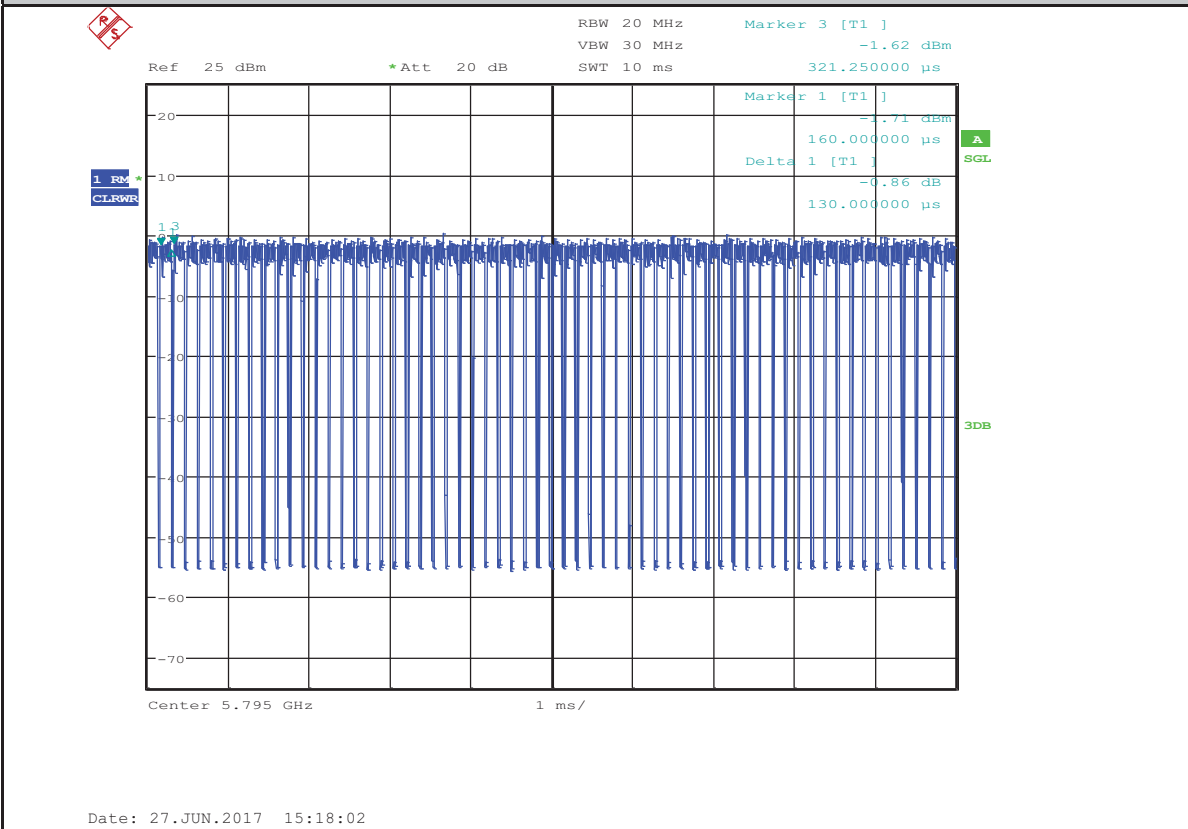
Duty Cycle_11AC40MIMO_5755_Ant2



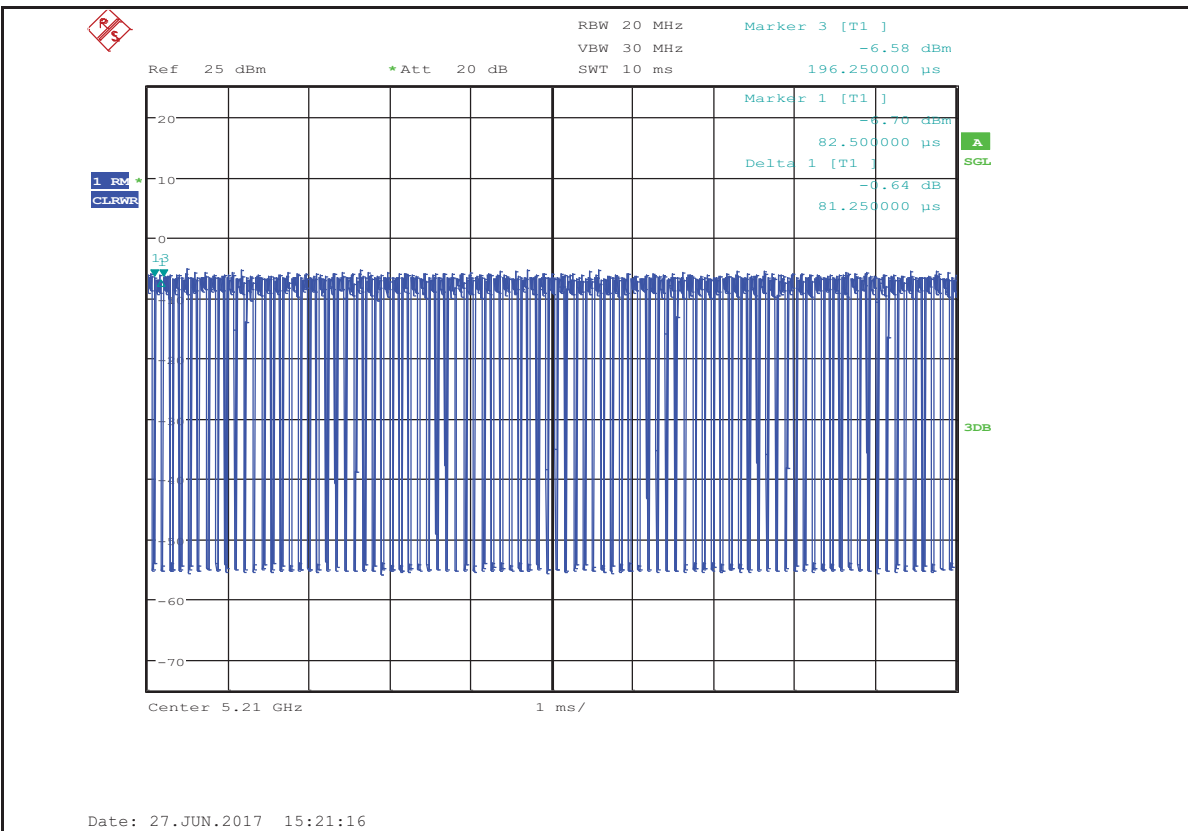
Duty Cycle_11AC40MIMO_5795_Ant1



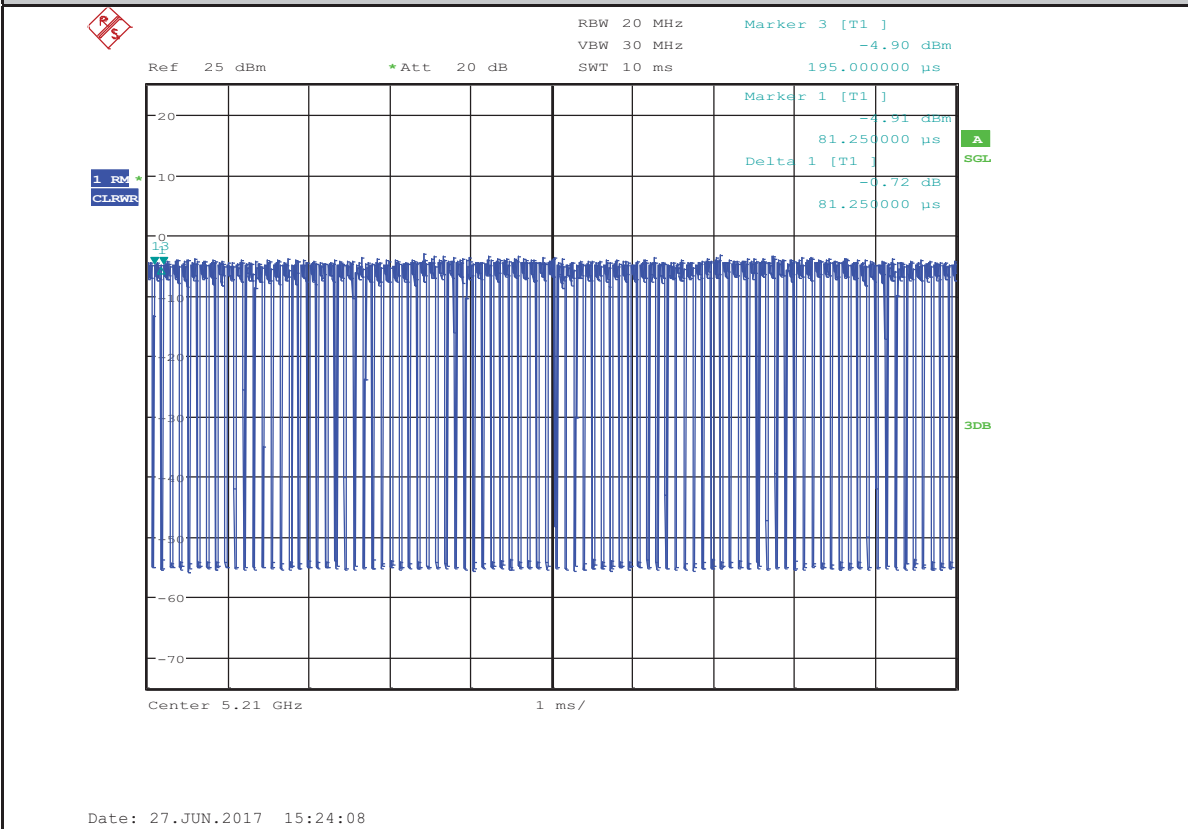
Duty Cycle_11AC40MIMO_5795_Ant2



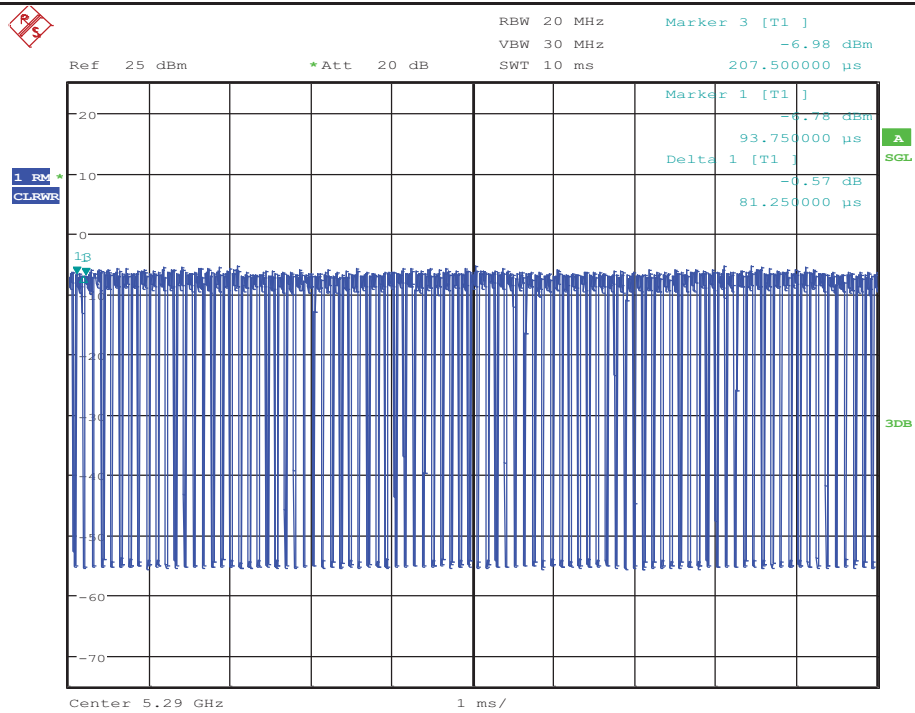
Duty Cycle_11AC80MIMO_5210_Ant1



Duty Cycle_11AC80MIMO_5210_Ant2

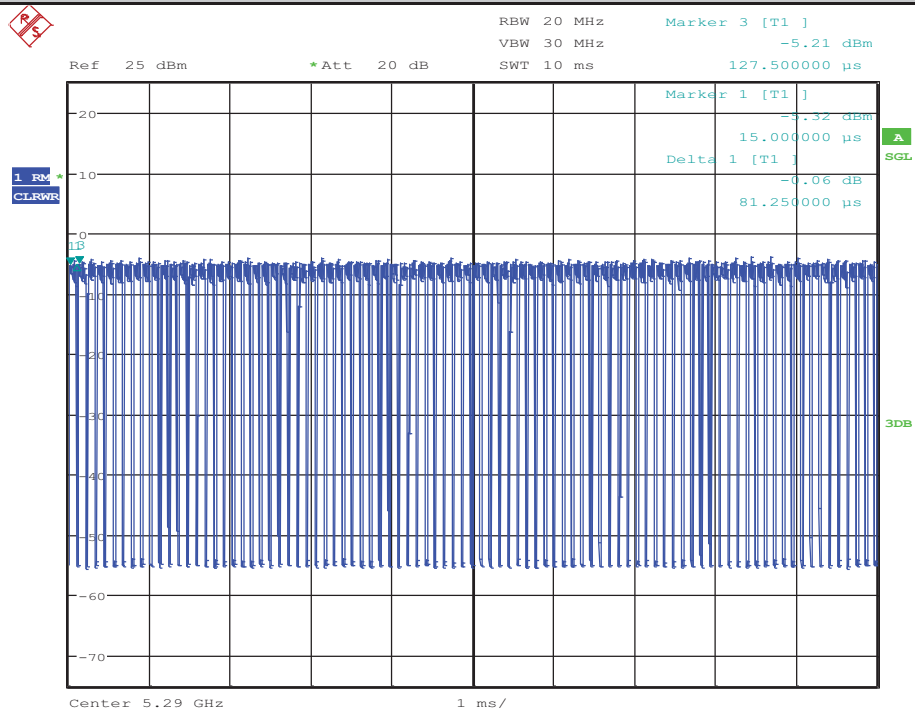


Duty Cycle_11AC80MIMO_5290_Ant1



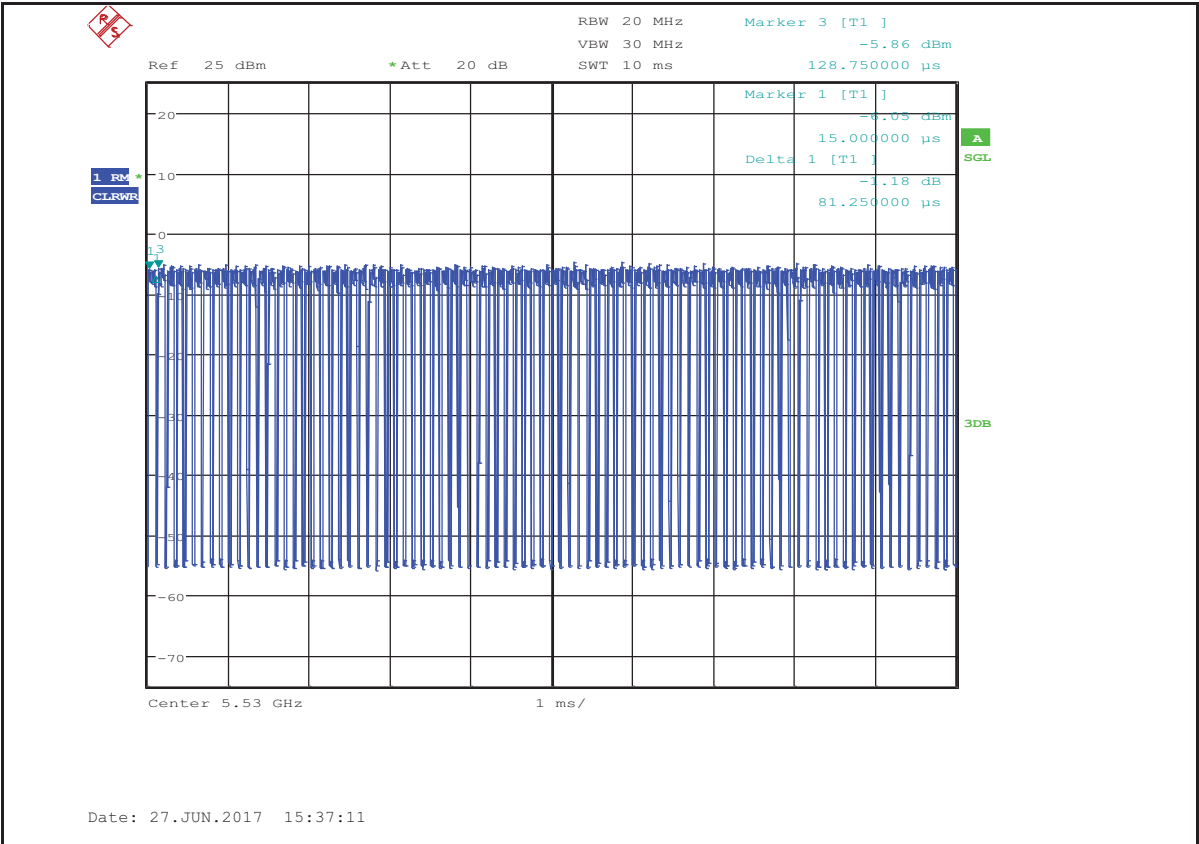
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Duty Cycle_11AC80MIMO_5290_Ant2

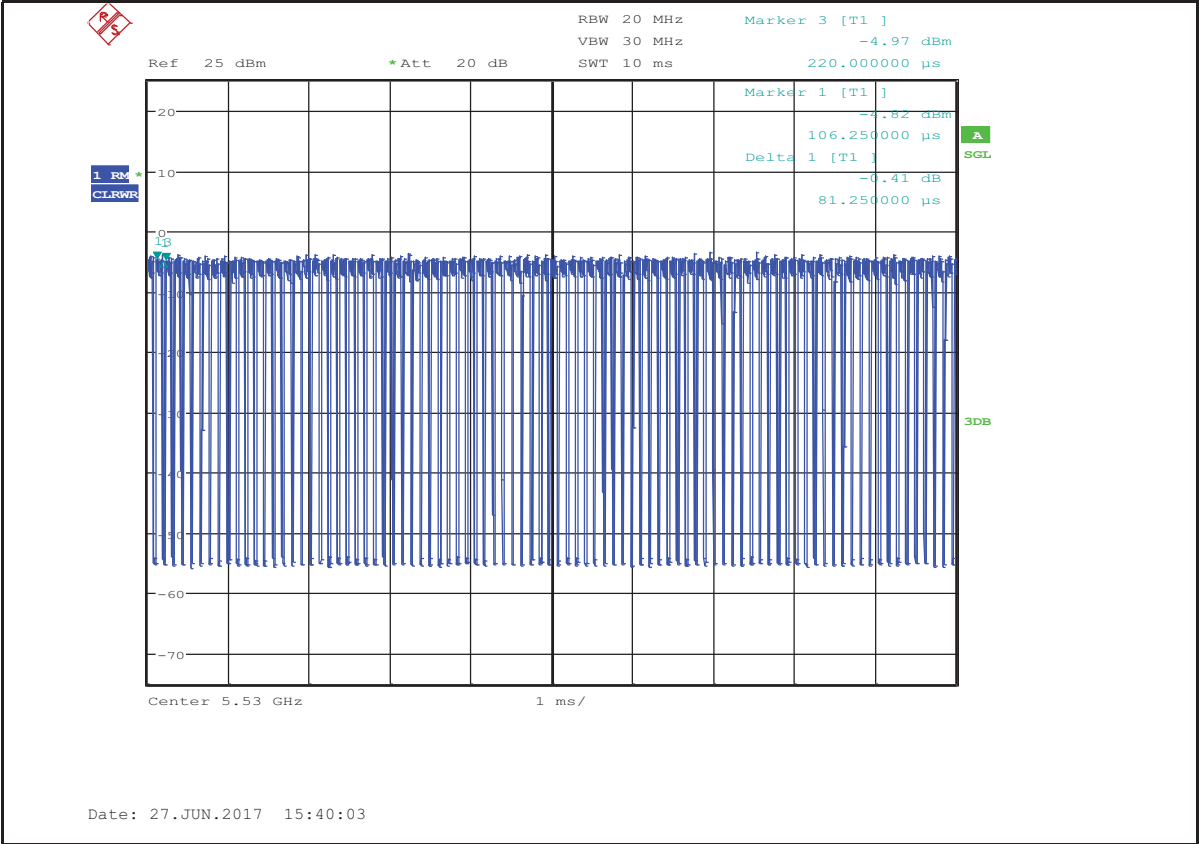


Date: 27.JUN.2017 15:30:46

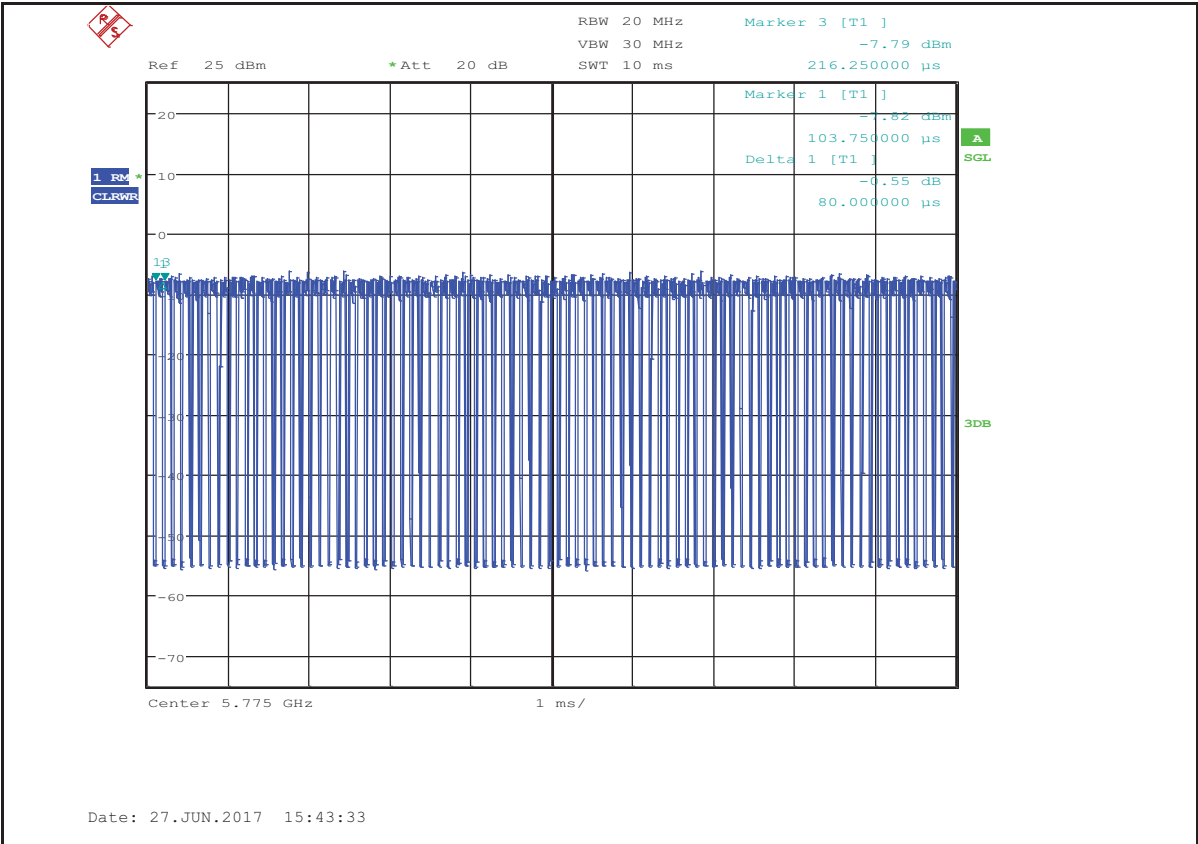
Duty Cycle_11AC80MIMO_5530_Ant1



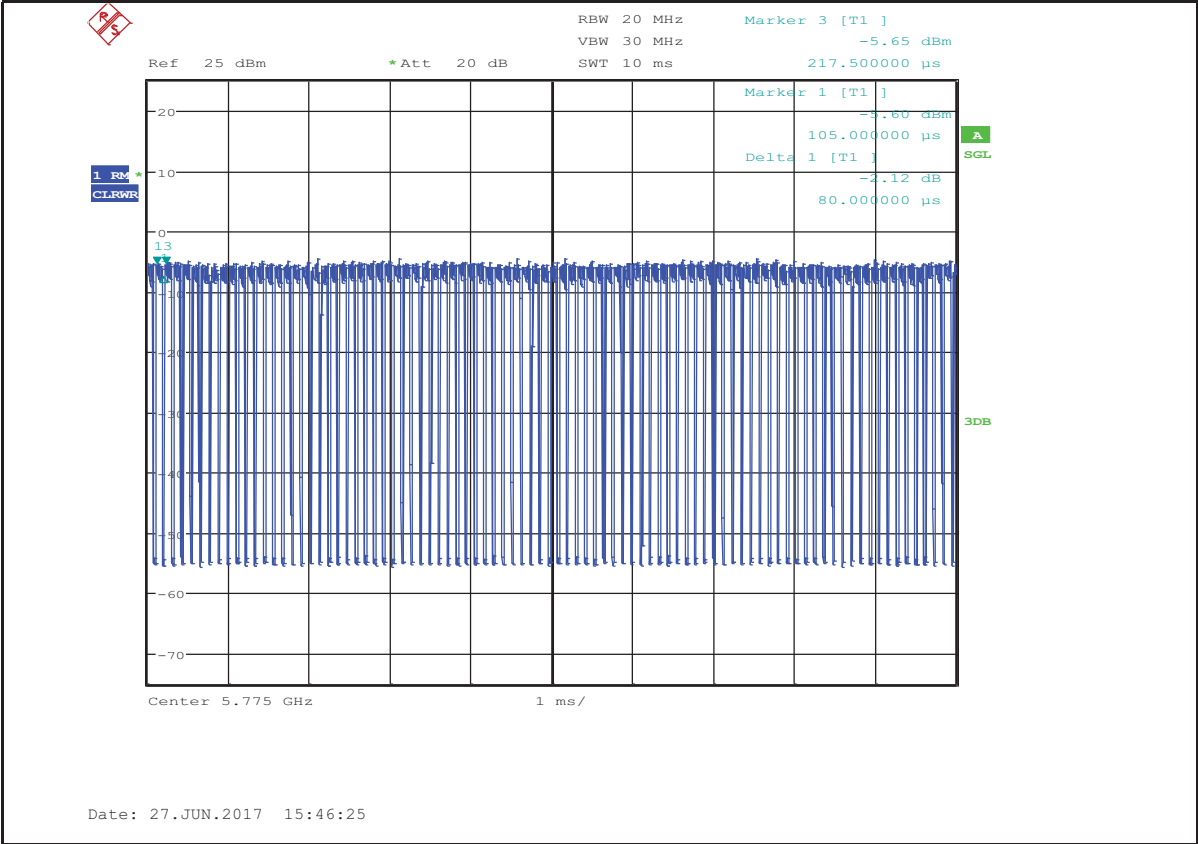
Duty Cycle_11AC80MIMO_5530_Ant2



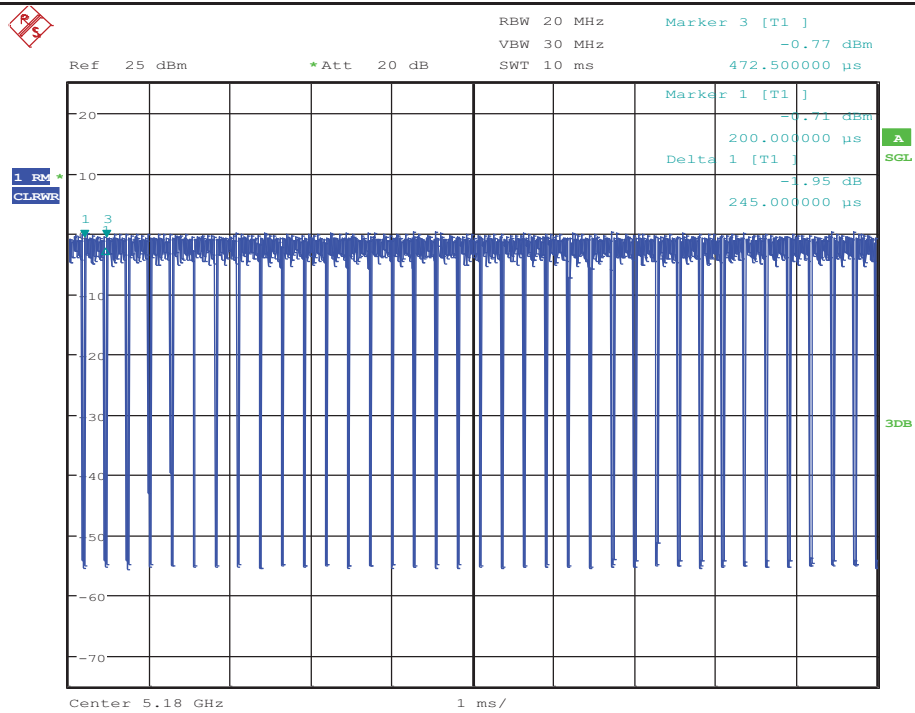
Duty Cycle_11AC80MIMO_5775_Ant1



Duty Cycle_11AC80MIMO_5775_Ant2

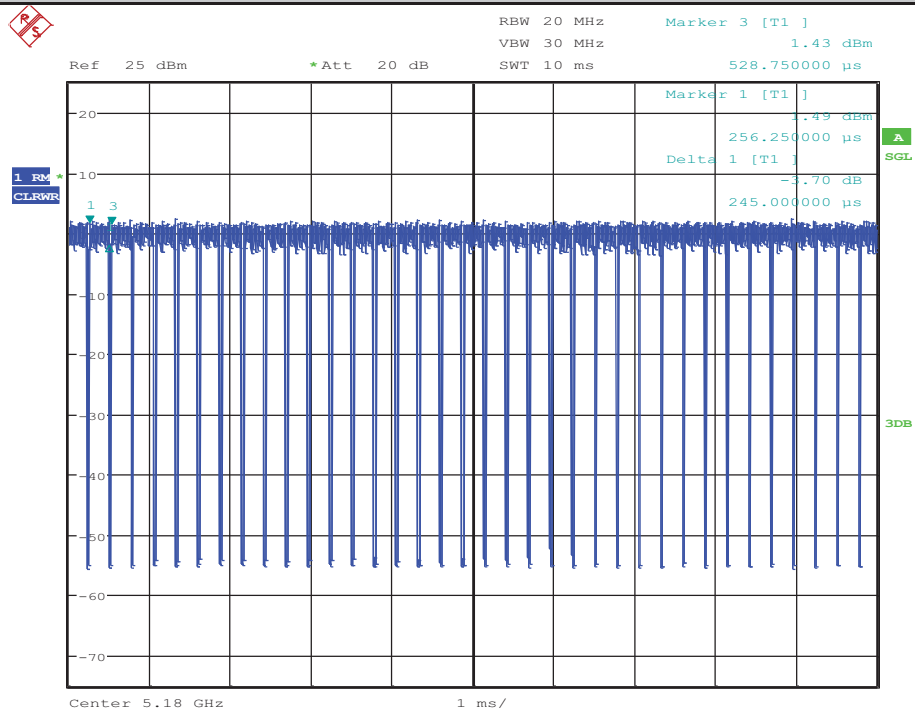


Duty Cycle_11AMIMO_5180_Ant1



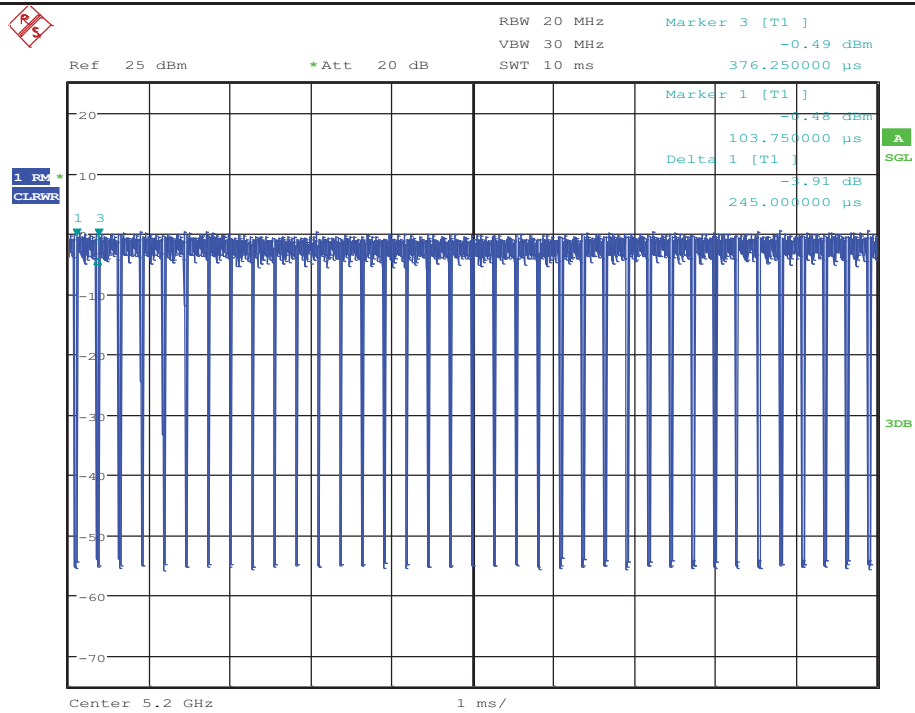
Date: 26.JUN.2017 19:10:50

Duty Cycle_11AMIMO_5180_Ant2



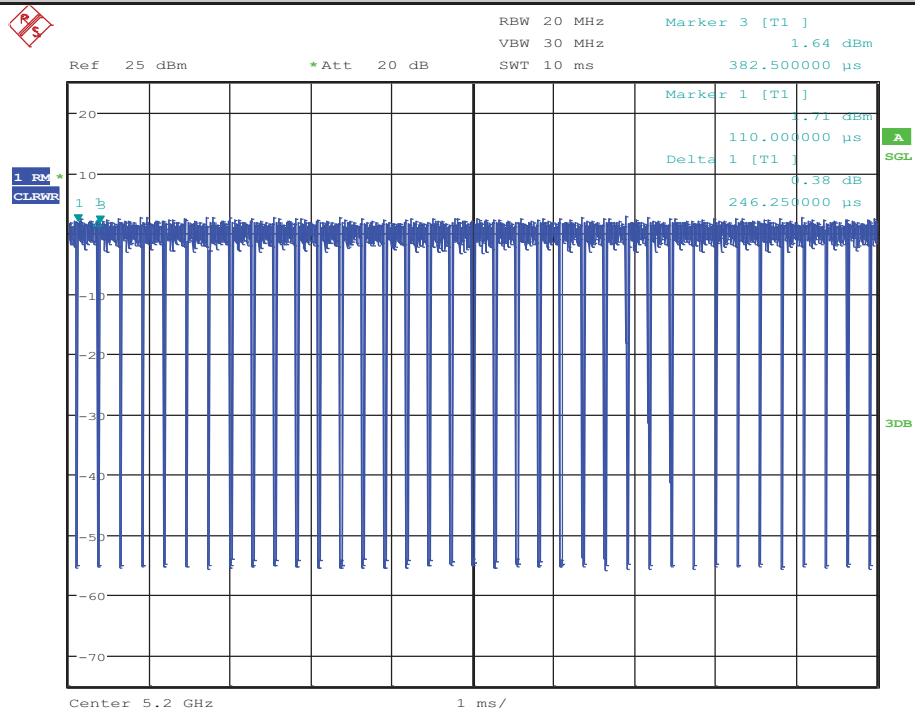
Date: 26.JUN.2017 19:13:40

Duty Cycle_11AMIMO_5200_Ant1



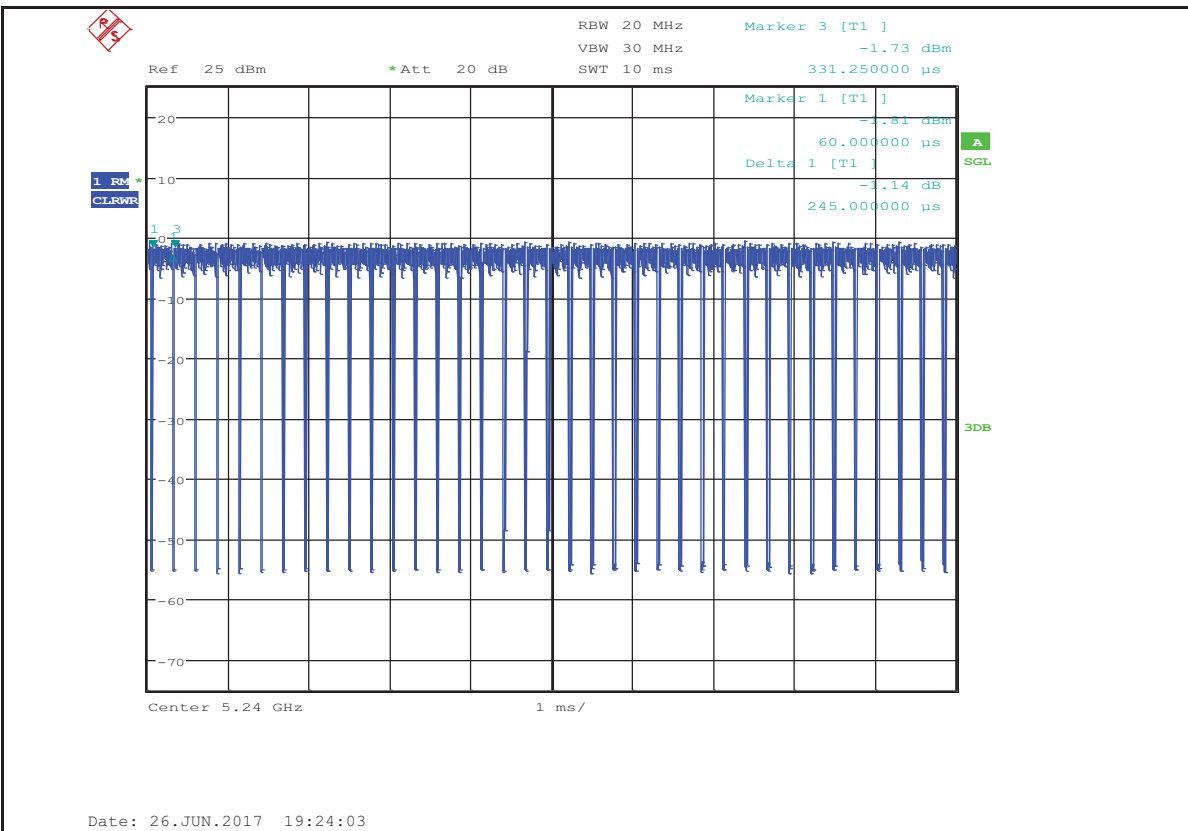
Date: 26.JUN.2017 19:17:35

Duty Cycle_11AMIMO_5200_Ant2

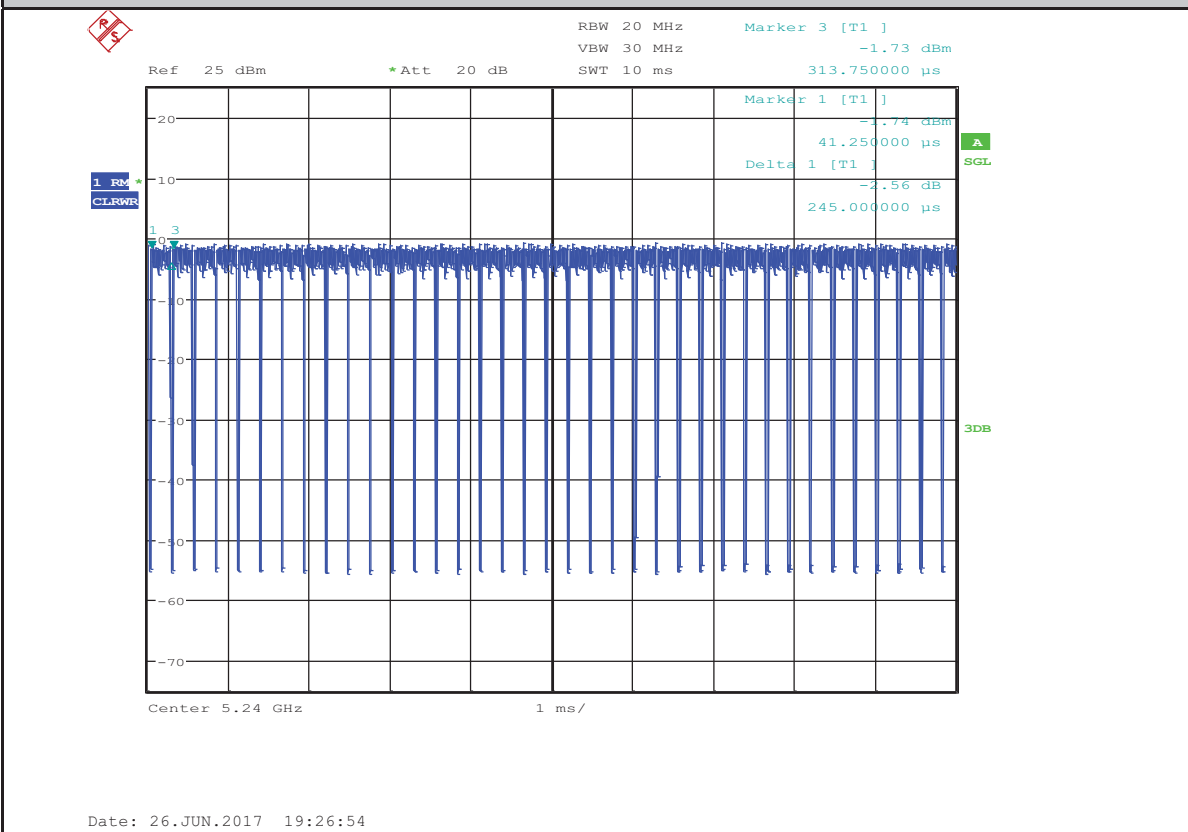


Date: 26.JUN.2017 19:20:25

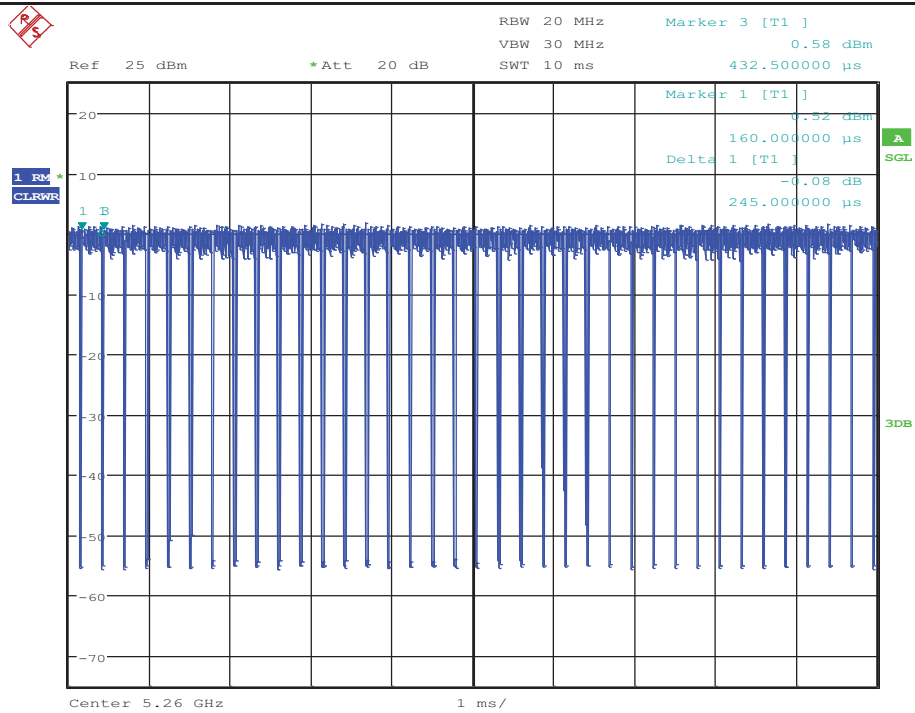
Duty Cycle_11AMIMO_5240_Ant1



Duty Cycle_11AMIMO_5240_Ant2

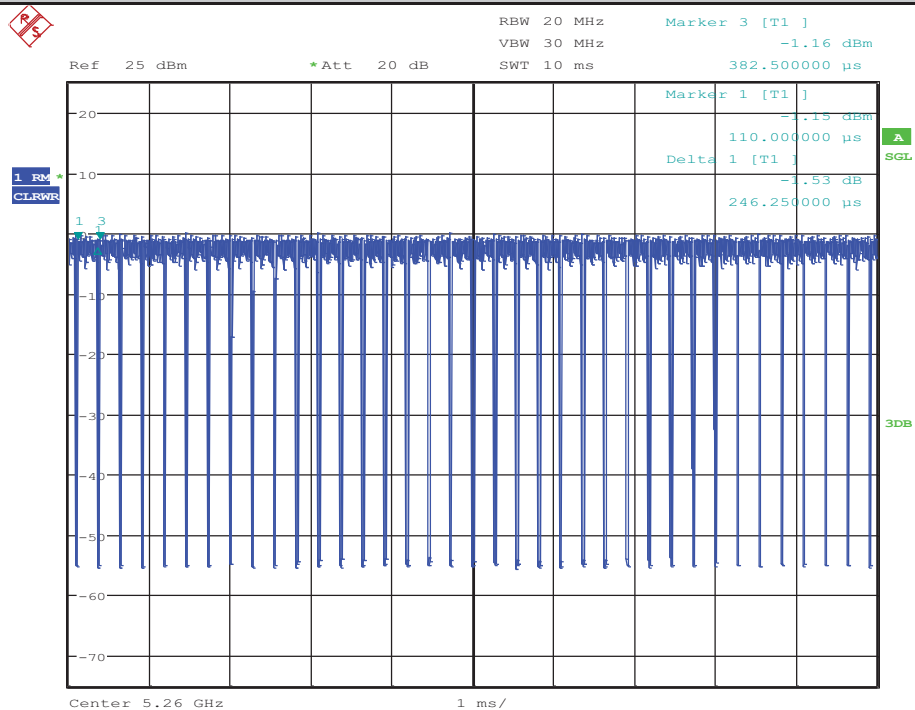


Duty Cycle_11AMIMO_5260_Ant1



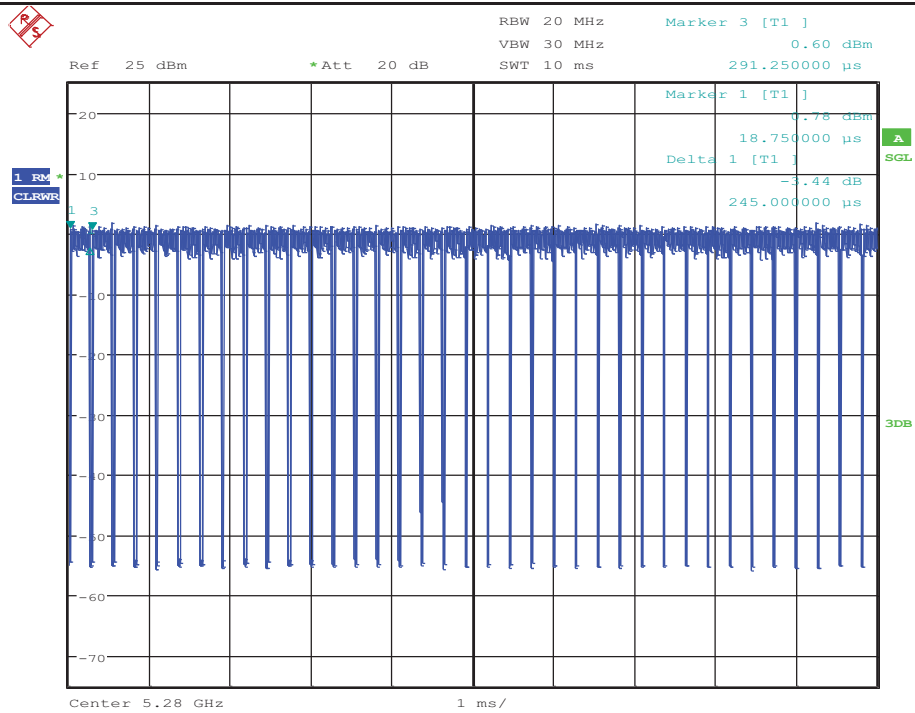
Date: 26.JUN.2017 19:30:38

Duty Cycle_11AMIMO_5260_Ant2



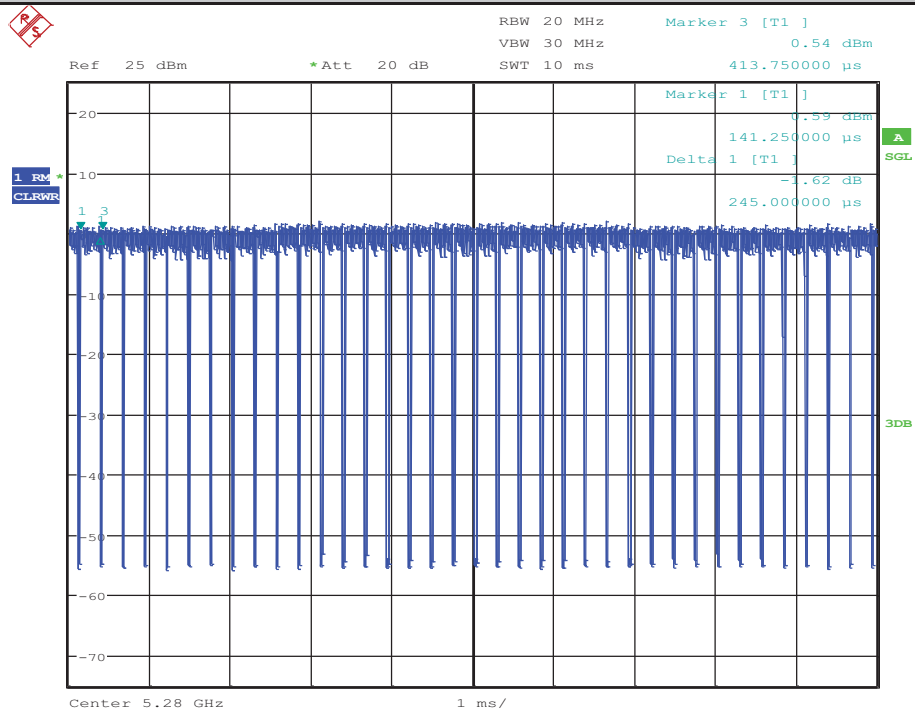
Date: 26.JUN.2017 19:33:29

Duty Cycle_11AMIMO_5280_Ant1



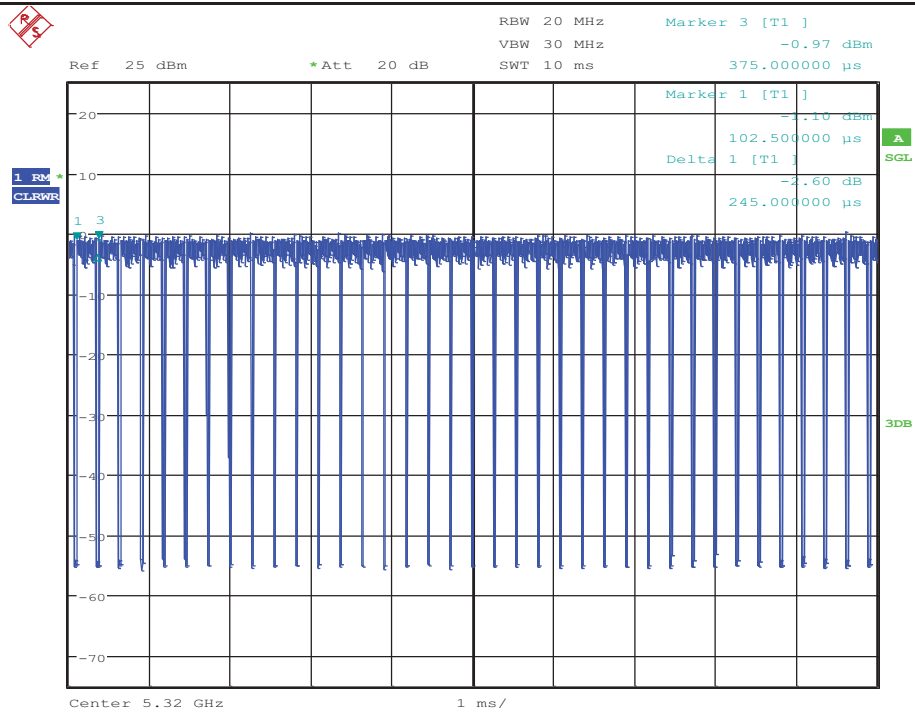
Date: 26.JUN.2017 19:37:20

Duty Cycle_11AMIMO_5280_Ant2



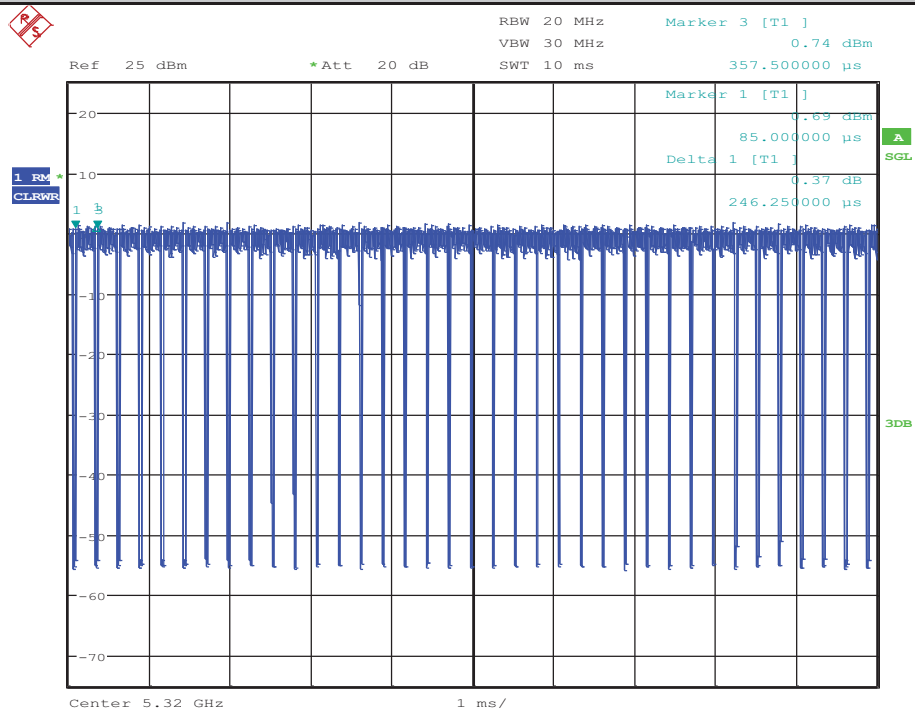
Date: 26.JUN.2017 19:40:10

Duty Cycle_11AMIMO_5320_Ant1



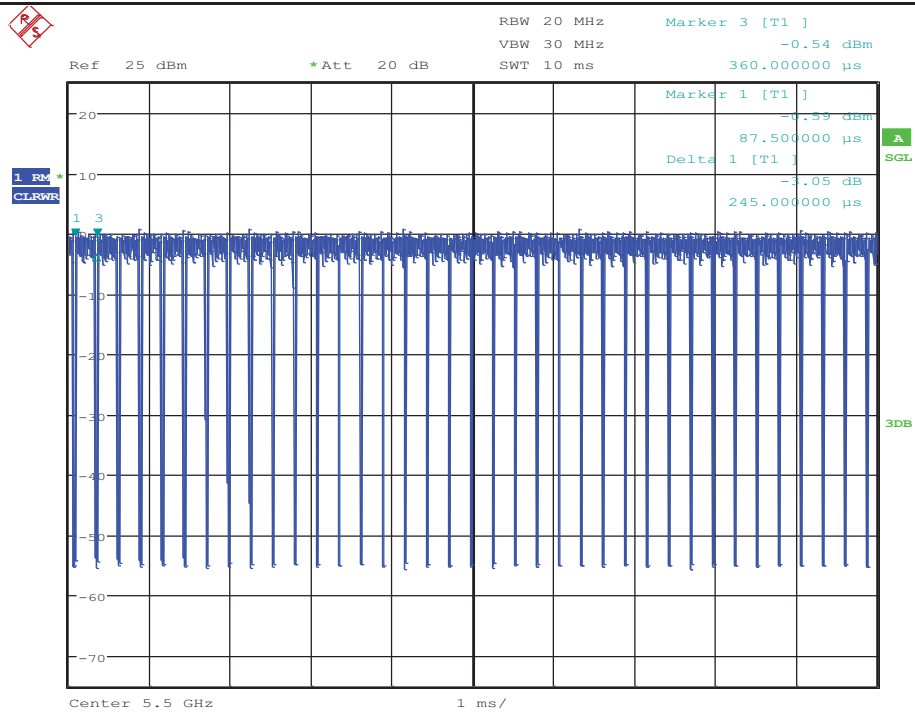
Date: 26.JUN.2017 19:44:01

Duty Cycle_11AMIMO_5320_Ant2



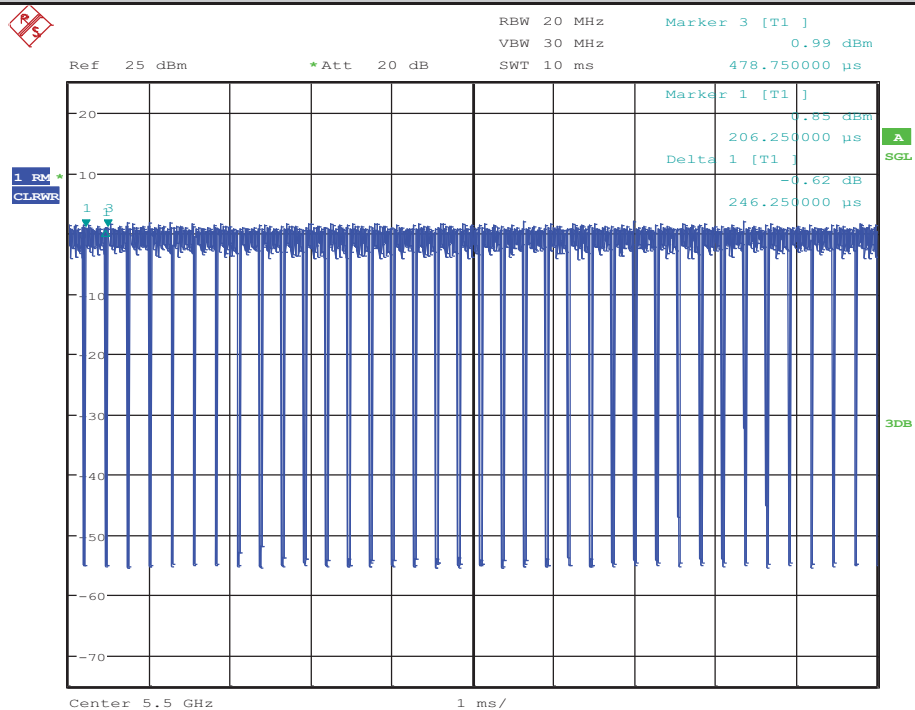
Date: 26.JUN.2017 19:46:52

Duty Cycle_11AMIMO_5500_Ant1



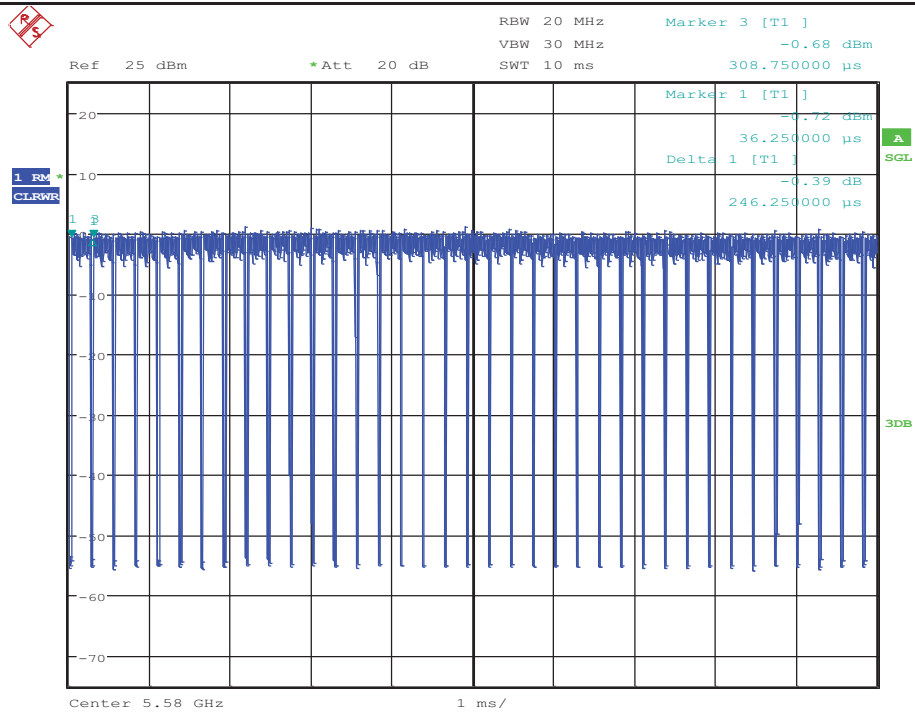
Date: 26.JUN.2017 20:24:27

Duty Cycle_11AMIMO_5500_Ant2

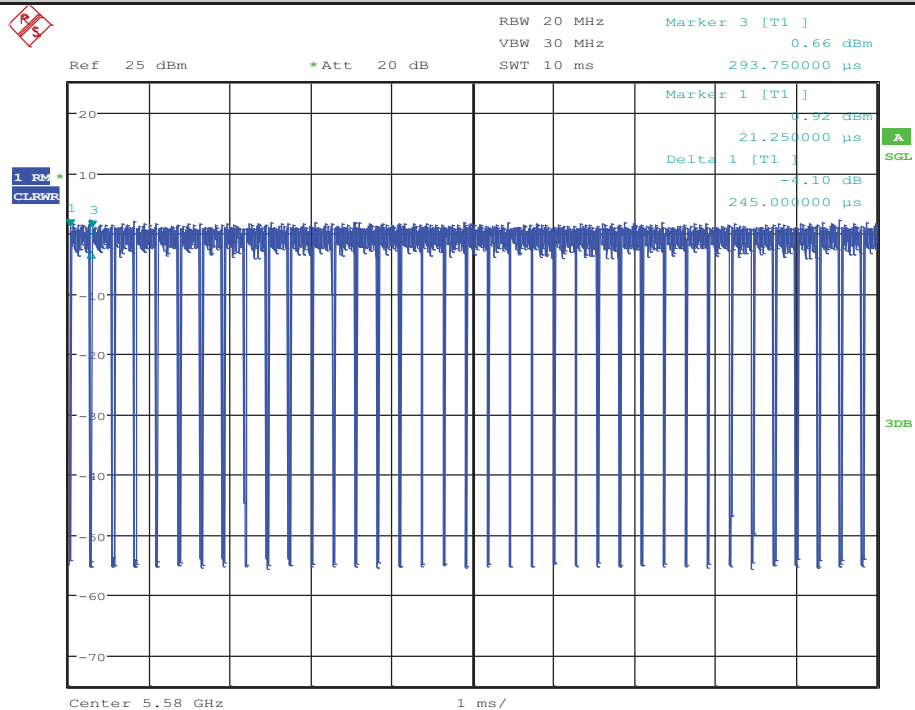


Date: 26.JUN.2017 20:27:17

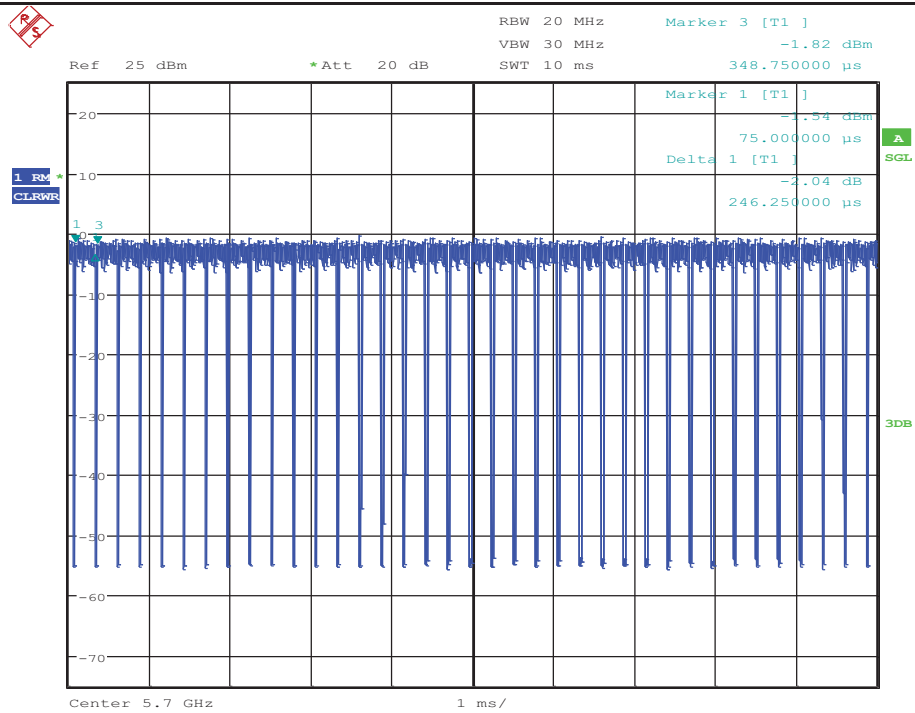
Duty Cycle_11AMIMO_5580_Ant1



Duty Cycle_11AMIMO_5580_Ant2

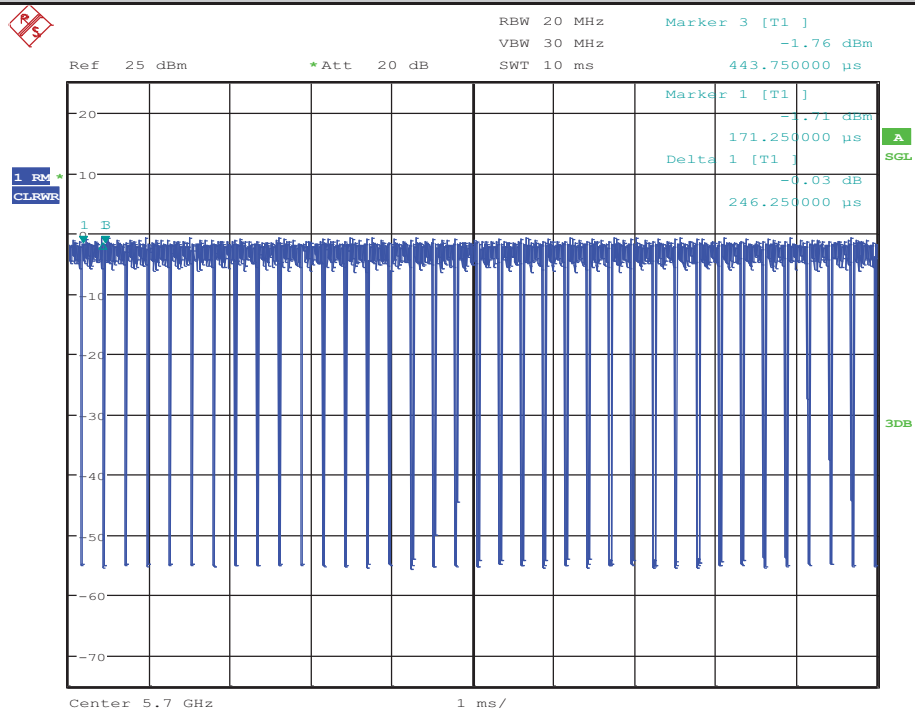


Duty Cycle_11AMIMO_5700_Ant1



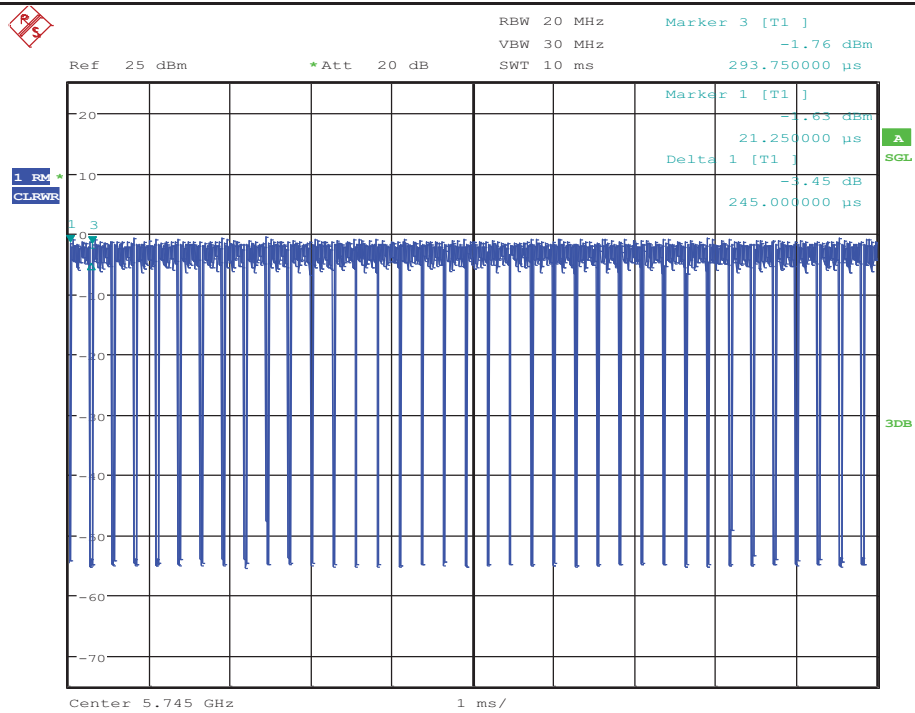
Date: 26.JUN.2017 20:38:20

Duty Cycle_11AMIMO_5700_Ant2



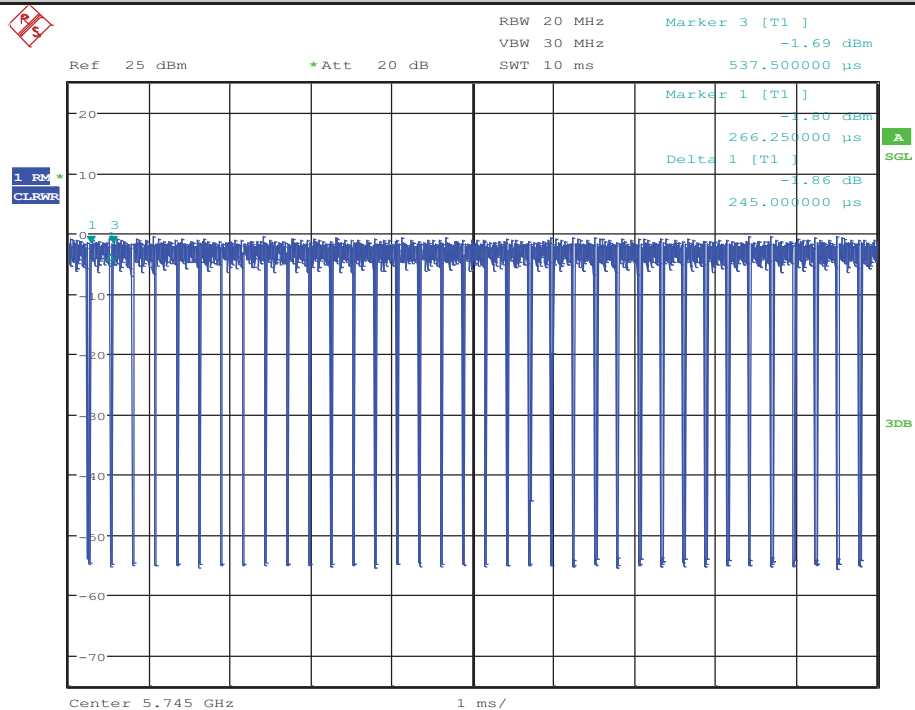
Date: 26.JUN.2017 20:41:10

Duty Cycle_11AMIMO_5745_Ant1



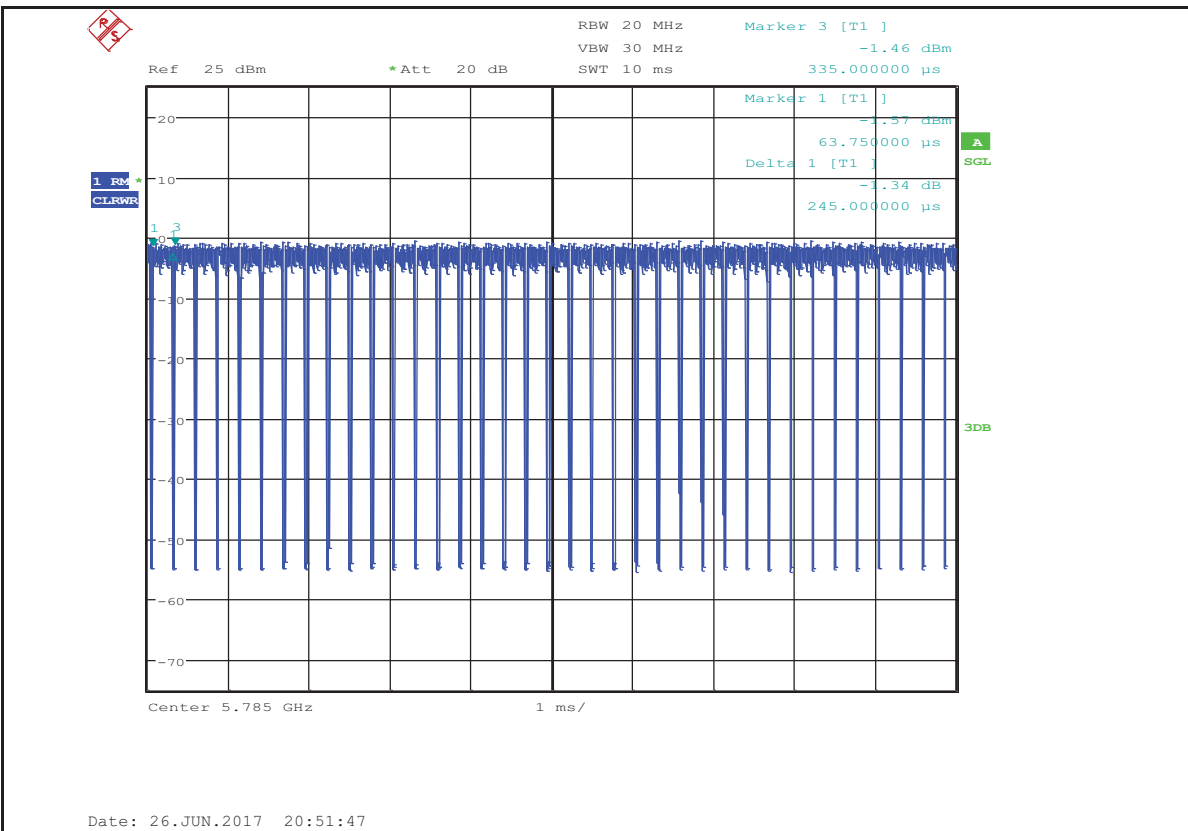
Date: 26.JUN.2017 20:44:40

Duty Cycle_11AMIMO_5745_Ant2

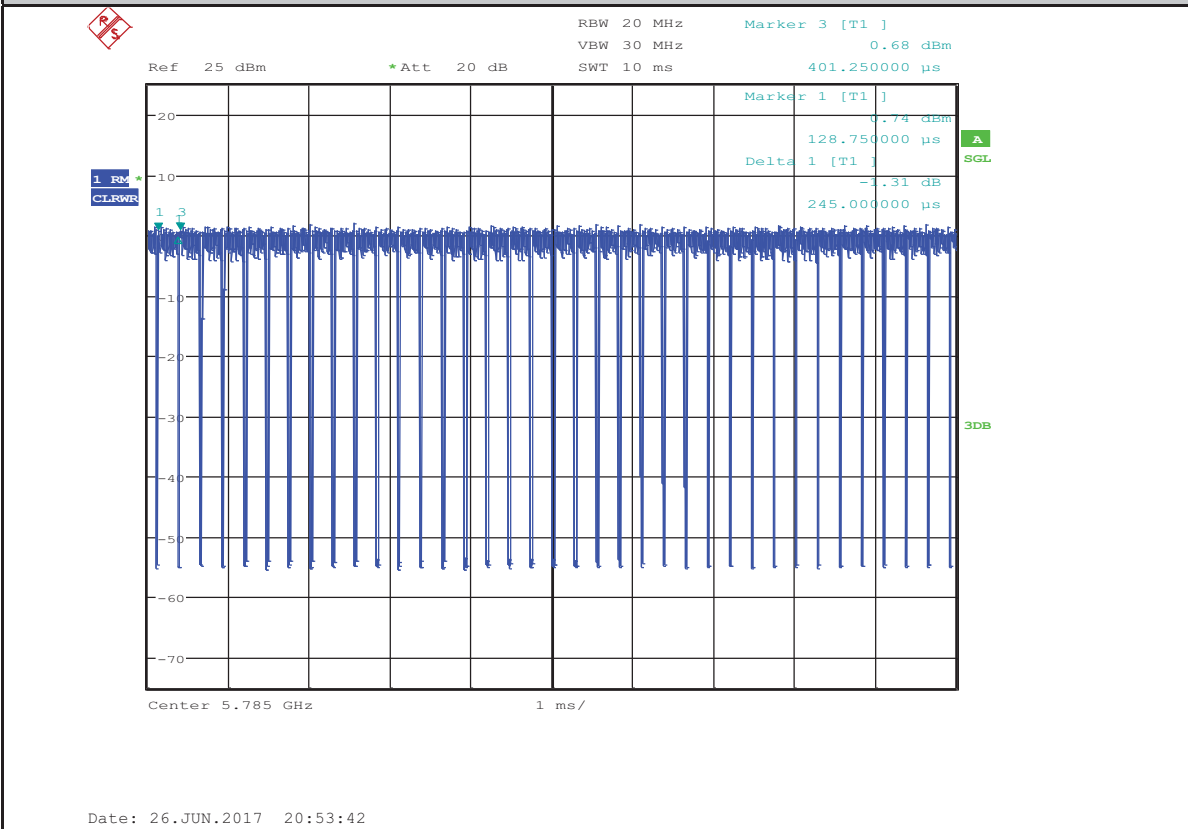


Date: 26.JUN.2017 20:46:35

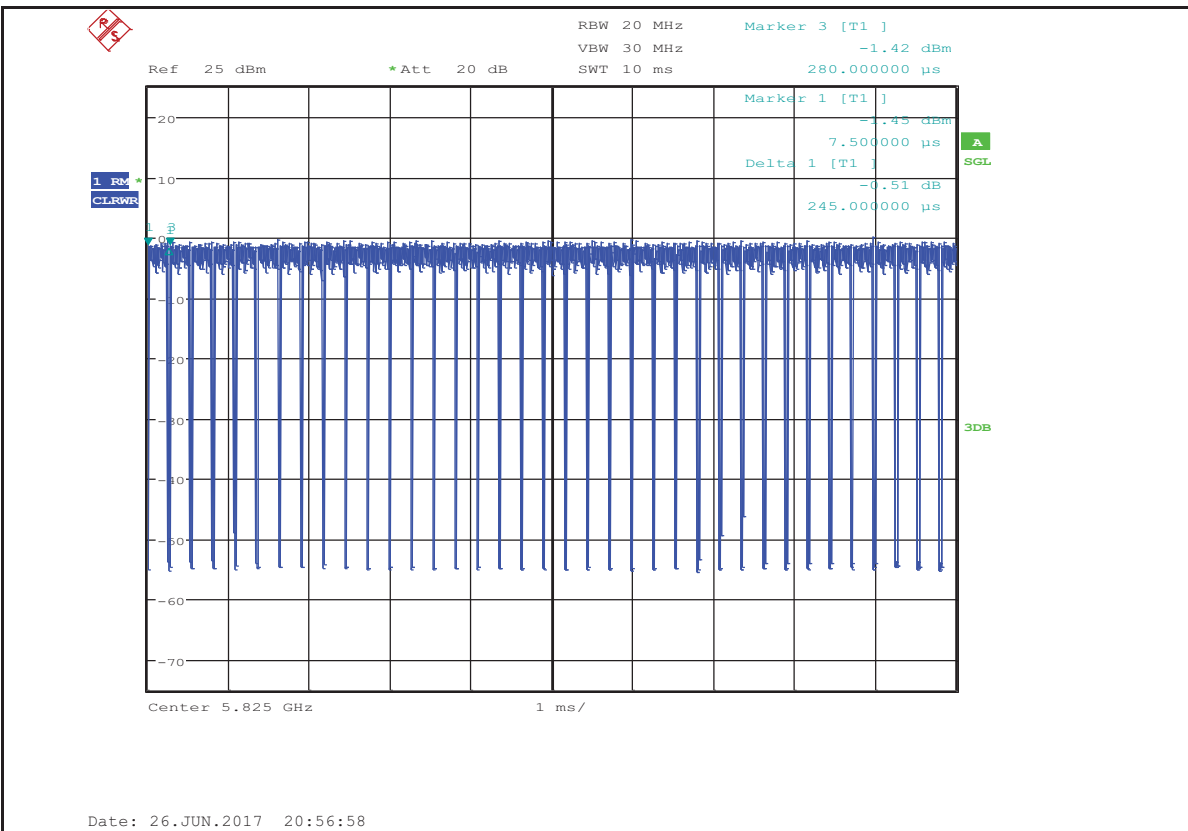
Duty Cycle_11AMIMO_5785_Ant1



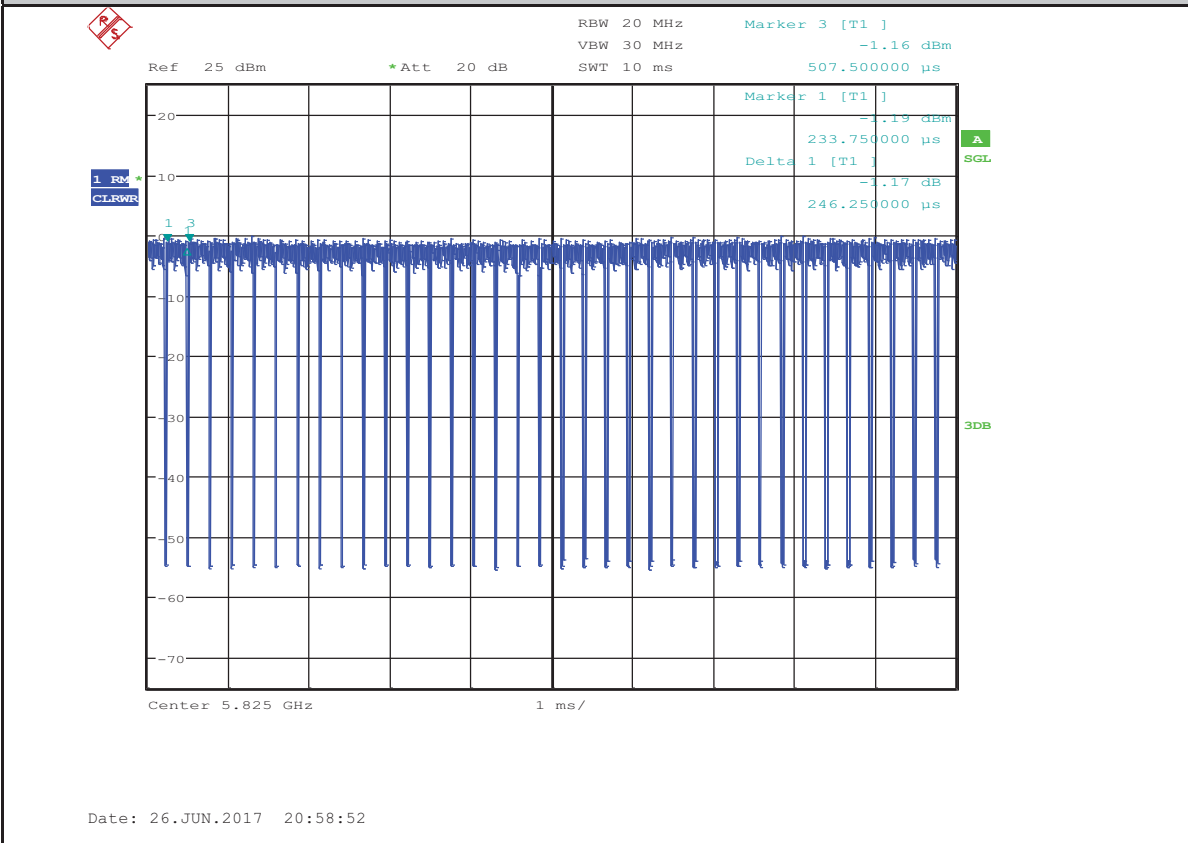
Duty Cycle_11AMIMO_5785_Ant2



Duty Cycle_11AMIMO_5825_Ant1

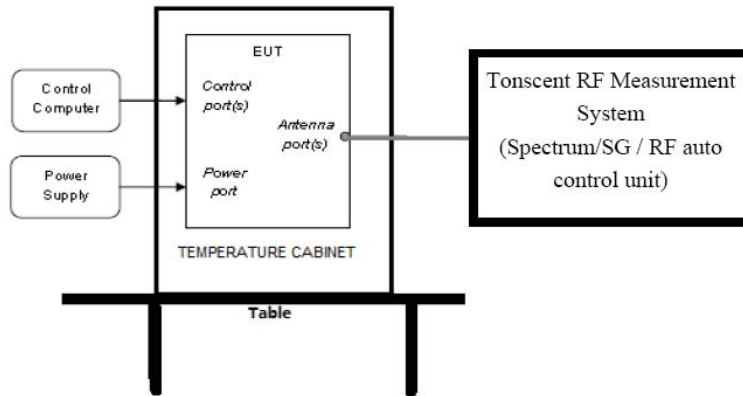


Duty Cycle_11AMIMO_5825_Ant2



5. 26dB Bandwidth, 6dB Bandwidth and 99% Bandwidth

5.1. Block diagram of test setup



5.2. Limits

FCC Part15, Subpart E/ RSS-247		
Test Item	Limit	Frequency Range (MHz)
Bandwidth	26 dB Bandwidth	5150-5250
	26 dB Bandwidth	5250-5350
	26 dB Bandwidth	For FCC:5470-5725 For IC:5470-5600 5650-5725
	Minimum 500kHz 6dB Bandwidth	5725-5850

5.3. 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 6dB Bandwidth: RBW=100kHz For 26dB Bandwidth: approximately 1% of the emission bandwidth.
VBW	For 6dB Bandwidth : VBW=300kHz For 26dB Bandwidth : >3RBW
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 6dB relative to the maximum level measured in the fundamental emission.

5.4. Test Result

Test Mode	Test Channel	Ant	26dB(5150-5250, 5250-5350,5470-5725) or	Limit[MHz]	Verdict
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			6dB(5725-5850) bandwidth Result [MHz]		
11N20MIMO	5180	Ant1	21.560	---	PASS
11N20MIMO	5180	Ant2	21.480	---	PASS
11N20MIMO	5200	Ant1	21.520	---	PASS
11N20MIMO	5200	Ant2	21.560	---	PASS
11N20MIMO	5240	Ant1	18.920	---	PASS
11N20MIMO	5240	Ant2	18.920	---	PASS
11N20MIMO	5260	Ant1	18.960	---	PASS
11N20MIMO	5260	Ant2	18.960	---	PASS
11N20MIMO	5280	Ant1	21.720	---	PASS
11N20MIMO	5280	Ant2	21.440	---	PASS
11N20MIMO	5320	Ant1	21.640	---	PASS
11N20MIMO	5320	Ant2	21.520	---	PASS
11N20MIMO	5500	Ant1	21.600	---	PASS
11N20MIMO	5500	Ant2	21.640	---	PASS
11N20MIMO	5580	Ant1	18.880	---	PASS
11N20MIMO	5580	Ant2	19.000	---	PASS
11N20MIMO	5700	Ant1	21.520	---	PASS
11N20MIMO	5700	Ant2	21.680	---	PASS
11N20MIMO	5745	Ant1	17.800	0.5	PASS
11N20MIMO	5745	Ant2	17.800	0.5	PASS
11N20MIMO	5785	Ant1	17.720	0.5	PASS
11N20MIMO	5785	Ant2	17.800	0.5	PASS
11N20MIMO	5825	Ant1	17.800	0.5	PASS
11N20MIMO	5825	Ant2	17.840	0.5	PASS
11N40MIMO	5190	Ant1	40.240	---	PASS
11N40MIMO	5190	Ant2	39.920	---	PASS
11N40MIMO	5230	Ant1	40.240	---	PASS
11N40MIMO	5230	Ant2	40.080	---	PASS
11N40MIMO	5270	Ant1	40.080	---	PASS
11N40MIMO	5270	Ant2	40.080	---	PASS
11N40MIMO	5310	Ant1	40.000	---	PASS
11N40MIMO	5310	Ant2	40.080	---	PASS
11N40MIMO	5510	Ant1	40.480	---	PASS
11N40MIMO	5510	Ant2	40.160	---	PASS
11N40MIMO	5550	Ant1	40.160	---	PASS
11N40MIMO	5550	Ant2	39.840	---	PASS
11N40MIMO	5670	Ant1	39.920	---	PASS
11N40MIMO	5670	Ant2	40.080	---	PASS
11N40MIMO	5755	Ant1	36.640	0.5	PASS

11N40MIMO	5755	Ant2	36.560	0.5	PASS
11N40MIMO	5795	Ant1	36.560	0.5	PASS
11N40MIMO	5795	Ant2	36.640	0.5	PASS
11AC20MIMO	5180	Ant1	21.440	---	PASS
11AC20MIMO	5180	Ant2	21.360	---	PASS
11AC20MIMO	5200	Ant1	21.560	---	PASS
11AC20MIMO	5200	Ant2	21.440	---	PASS
11AC20MIMO	5240	Ant1	18.880	---	PASS
11AC20MIMO	5240	Ant2	18.840	---	PASS
11AC20MIMO	5260	Ant1	18.960	---	PASS
11AC20MIMO	5260	Ant2	18.800	---	PASS
11AC20MIMO	5280	Ant1	21.360	---	PASS
11AC20MIMO	5280	Ant2	21.440	---	PASS
11AC20MIMO	5320	Ant1	21.600	---	PASS
11AC20MIMO	5320	Ant2	21.560	---	PASS
11AC20MIMO	5500	Ant1	21.480	---	PASS
11AC20MIMO	5500	Ant2	21.560	---	PASS
11AC20MIMO	5580	Ant1	19.080	---	PASS
11AC20MIMO	5580	Ant2	18.960	---	PASS
11AC20MIMO	5700	Ant1	21.480	---	PASS
11AC20MIMO	5700	Ant2	21.680	---	PASS
11AC20MIMO	5745	Ant1	17.800	0.5	PASS
11AC20MIMO	5745	Ant2	17.760	0.5	PASS
11AC20MIMO	5785	Ant1	17.800	0.5	PASS
11AC20MIMO	5785	Ant2	17.720	0.5	PASS
11AC20MIMO	5825	Ant1	17.800	0.5	PASS
11AC20MIMO	5825	Ant2	17.800	0.5	PASS
11AC40MIMO	5190	Ant1	40.000	---	PASS
11AC40MIMO	5190	Ant2	40.000	---	PASS
11AC40MIMO	5230	Ant1	40.400	---	PASS
11AC40MIMO	5230	Ant2	39.920	---	PASS
11AC40MIMO	5270	Ant1	40.160	---	PASS
11AC40MIMO	5270	Ant2	40.080	---	PASS
11AC40MIMO	5310	Ant1	40.320	---	PASS
11AC40MIMO	5310	Ant2	40.320	---	PASS
11AC40MIMO	5510	Ant1	40.320	---	PASS
11AC40MIMO	5510	Ant2	40.160	---	PASS
11AC40MIMO	5550	Ant1	40.240	---	PASS
11AC40MIMO	5550	Ant2	40.000	---	PASS
11AC40MIMO	5670	Ant1	40.400	---	PASS

11AC40MIMO	5670	Ant2	40.080	---	PASS
11AC40MIMO	5755	Ant1	36.640	0.5	PASS
11AC40MIMO	5755	Ant2	36.560	0.5	PASS
11AC40MIMO	5795	Ant1	36.560	0.5	PASS
11AC40MIMO	5795	Ant2	36.560	0.5	PASS
11AC80MIMO	5210	Ant1	81.920	---	PASS
11AC80MIMO	5210	Ant2	81.760	---	PASS
11AC80MIMO	5290	Ant1	82.240	---	PASS
11AC80MIMO	5290	Ant2	81.920	---	PASS
11AC80MIMO	5530	Ant1	83.040	---	PASS
11AC80MIMO	5530	Ant2	82.240	---	PASS
11AC80MIMO	5775	Ant1	76.640	0.5	PASS
11AC80MIMO	5775	Ant2	76.640	0.5	PASS
11AMIMO	5180	Ant1	21.040	---	PASS
11AMIMO	5180	Ant2	21.240	---	PASS
11AMIMO	5200	Ant1	20.920	---	PASS
11AMIMO	5200	Ant2	21.280	---	PASS
11AMIMO	5240	Ant1	18.360	---	PASS
11AMIMO	5240	Ant2	18.400	---	PASS
11AMIMO	5260	Ant1	18.560	---	PASS
11AMIMO	5260	Ant2	18.520	---	PASS
11AMIMO	5280	Ant1	21.040	---	PASS
11AMIMO	5280	Ant2	21.240	---	PASS
11AMIMO	5320	Ant1	21.160	---	PASS
11AMIMO	5320	Ant2	21.280	---	PASS
11AMIMO	5500	Ant1	21.120	---	PASS
11AMIMO	5500	Ant2	21.280	---	PASS
11AMIMO	5580	Ant1	18.400	---	PASS
11AMIMO	5580	Ant2	18.600	---	PASS
11AMIMO	5700	Ant1	21.040	---	PASS
11AMIMO	5700	Ant2	21.040	---	PASS
11AMIMO	5745	Ant1	16.440	0.5	PASS
11AMIMO	5745	Ant2	16.480	0.5	PASS
11AMIMO	5785	Ant1	16.440	0.5	PASS
11AMIMO	5785	Ant2	16.520	0.5	PASS
11AMIMO	5825	Ant1	16.520	0.5	PASS
11AMIMO	5825	Ant2	16.480	0.5	PASS

Test Mode	Test Channel	Ant	99% OBW[MHz]	Limit[MHz]	Verdict
11N20MIMO	5180	Ant1	17.790	---	PASS
11N20MIMO	5180	Ant2	17.800	---	PASS

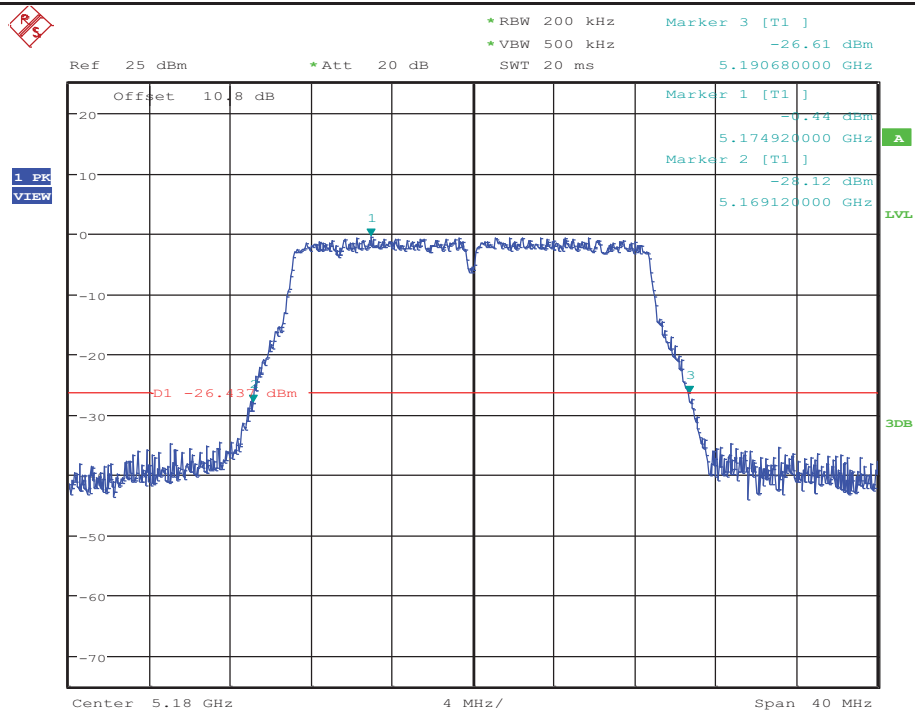
11N20MIMO	5200	Ant1	17.790	---	PASS
11N20MIMO	5200	Ant2	17.785	---	PASS
11N20MIMO	5240	Ant1	17.440	---	PASS
11N20MIMO	5240	Ant2	17.440	---	PASS
11N20MIMO	5260	Ant1	17.445	---	PASS
11N20MIMO	5260	Ant2	17.425	---	PASS
11N20MIMO	5280	Ant1	17.785	---	PASS
11N20MIMO	5280	Ant2	17.790	---	PASS
11N20MIMO	5320	Ant1	17.810	---	PASS
11N20MIMO	5320	Ant2	17.800	---	PASS
11N20MIMO	5500	Ant1	17.815	---	PASS
11N20MIMO	5500	Ant2	17.825	---	PASS
11N20MIMO	5580	Ant1	17.455	---	PASS
11N20MIMO	5580	Ant2	17.450	---	PASS
11N20MIMO	5700	Ant1	17.835	---	PASS
11N20MIMO	5700	Ant2	17.805	---	PASS
11N20MIMO	5745	Ant1	17.680	---	PASS
11N20MIMO	5745	Ant2	17.675	---	PASS
11N20MIMO	5785	Ant1	17.655	---	PASS
11N20MIMO	5785	Ant2	17.670	---	PASS
11N20MIMO	5825	Ant1	17.675	---	PASS
11N20MIMO	5825	Ant2	17.680	---	PASS
11N40MIMO	5190	Ant1	36.390	---	PASS
11N40MIMO	5190	Ant2	36.410	---	PASS
11N40MIMO	5230	Ant1	36.430	---	PASS
11N40MIMO	5230	Ant2	36.560	---	PASS
11N40MIMO	5270	Ant1	36.400	---	PASS
11N40MIMO	5270	Ant2	36.420	---	PASS
11N40MIMO	5310	Ant1	36.390	---	PASS
11N40MIMO	5310	Ant2	36.440	---	PASS
11N40MIMO	5510	Ant1	36.480	---	PASS
11N40MIMO	5510	Ant2	36.540	---	PASS
11N40MIMO	5550	Ant1	36.410	---	PASS
11N40MIMO	5550	Ant2	36.500	---	PASS
11N40MIMO	5670	Ant1	36.400	---	PASS
11N40MIMO	5670	Ant2	36.440	---	PASS
11N40MIMO	5755	Ant1	36.250	---	PASS
11N40MIMO	5755	Ant2	36.180	---	PASS
11N40MIMO	5795	Ant1	36.200	---	PASS
11N40MIMO	5795	Ant2	36.200	---	PASS

11AC20MIMO	5180	Ant1	17.800	---	PASS
11AC20MIMO	5180	Ant2	17.785	---	PASS
11AC20MIMO	5200	Ant1	17.785	---	PASS
11AC20MIMO	5200	Ant2	17.765	---	PASS
11AC20MIMO	5240	Ant1	17.450	---	PASS
11AC20MIMO	5240	Ant2	17.450	---	PASS
11AC20MIMO	5260	Ant1	17.455	---	PASS
11AC20MIMO	5260	Ant2	17.420	---	PASS
11AC20MIMO	5280	Ant1	17.795	---	PASS
11AC20MIMO	5280	Ant2	17.760	---	PASS
11AC20MIMO	5320	Ant1	17.810	---	PASS
11AC20MIMO	5320	Ant2	17.765	---	PASS
11AC20MIMO	5500	Ant1	17.810	---	PASS
11AC20MIMO	5500	Ant2	17.800	---	PASS
11AC20MIMO	5580	Ant1	17.455	---	PASS
11AC20MIMO	5580	Ant2	17.440	---	PASS
11AC20MIMO	5700	Ant1	17.870	---	PASS
11AC20MIMO	5700	Ant2	17.815	---	PASS
11AC20MIMO	5745	Ant1	17.665	---	PASS
11AC20MIMO	5745	Ant2	17.680	---	PASS
11AC20MIMO	5785	Ant1	17.665	---	PASS
11AC20MIMO	5785	Ant2	17.660	---	PASS
11AC20MIMO	5825	Ant1	17.680	---	PASS
11AC20MIMO	5825	Ant2	17.675	---	PASS
11AC40MIMO	5190	Ant1	36.420	---	PASS
11AC40MIMO	5190	Ant2	36.310	---	PASS
11AC40MIMO	5230	Ant1	36.460	---	PASS
11AC40MIMO	5230	Ant2	36.460	---	PASS
11AC40MIMO	5270	Ant1	36.370	---	PASS
11AC40MIMO	5270	Ant2	36.330	---	PASS
11AC40MIMO	5310	Ant1	36.390	---	PASS
11AC40MIMO	5310	Ant2	36.320	---	PASS
11AC40MIMO	5510	Ant1	36.480	---	PASS
11AC40MIMO	5510	Ant2	36.430	---	PASS
11AC40MIMO	5550	Ant1	36.380	---	PASS
11AC40MIMO	5550	Ant2	36.370	---	PASS
11AC40MIMO	5670	Ant1	36.420	---	PASS
11AC40MIMO	5670	Ant2	36.350	---	PASS
11AC40MIMO	5755	Ant1	36.210	---	PASS
11AC40MIMO	5755	Ant2	36.160	---	PASS

11AC40MIMO	5795	Ant1	36.180	---	PASS
11AC40MIMO	5795	Ant2	36.160	---	PASS
11AC80MIMO	5210	Ant1	76.020	---	PASS
11AC80MIMO	5210	Ant2	76.020	---	PASS
11AC80MIMO	5290	Ant1	76.020	---	PASS
11AC80MIMO	5290	Ant2	76.060	---	PASS
11AC80MIMO	5530	Ant1	76.120	---	PASS
11AC80MIMO	5530	Ant2	76.100	---	PASS
11AC80MIMO	5775	Ant1	75.740	---	PASS
11AC80MIMO	5775	Ant2	75.660	---	PASS
11AMIMO	5180	Ant1	16.565	---	PASS
11AMIMO	5180	Ant2	16.695	---	PASS
11AMIMO	5200	Ant1	16.560	---	PASS
11AMIMO	5200	Ant2	16.725	---	PASS
11AMIMO	5240	Ant1	16.440	---	PASS
11AMIMO	5240	Ant2	16.490	---	PASS
11AMIMO	5260	Ant1	16.485	---	PASS
11AMIMO	5260	Ant2	16.485	---	PASS
11AMIMO	5280	Ant1	16.550	---	PASS
11AMIMO	5280	Ant2	16.670	---	PASS
11AMIMO	5320	Ant1	16.575	---	PASS
11AMIMO	5320	Ant2	16.710	---	PASS
11AMIMO	5500	Ant1	16.565	---	PASS
11AMIMO	5500	Ant2	16.740	---	PASS
11AMIMO	5580	Ant1	16.440	---	PASS
11AMIMO	5580	Ant2	16.505	---	PASS
11AMIMO	5700	Ant1	16.605	---	PASS
11AMIMO	5700	Ant2	16.605	---	PASS
11AMIMO	5745	Ant1	16.440	---	PASS
11AMIMO	5745	Ant2	16.465	---	PASS
11AMIMO	5785	Ant1	16.445	---	PASS
11AMIMO	5785	Ant2	16.470	---	PASS
11AMIMO	5825	Ant1	16.435	---	PASS
11AMIMO	5825	Ant2	16.475	---	PASS

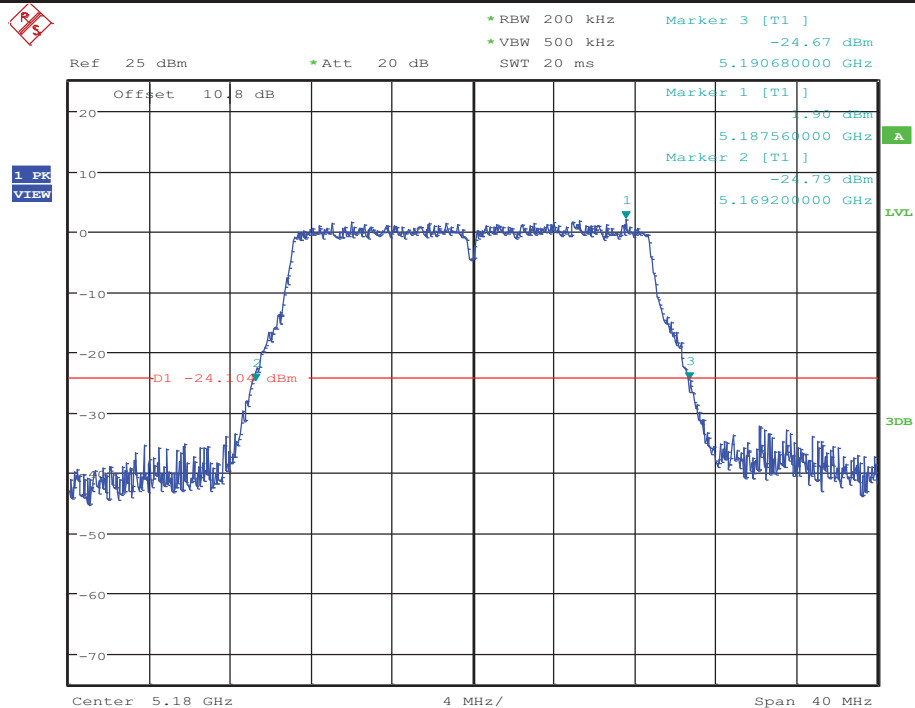
5.5. Original test data

Emission Bandwidth Measurement_11N20MIMO_5180_Ant1



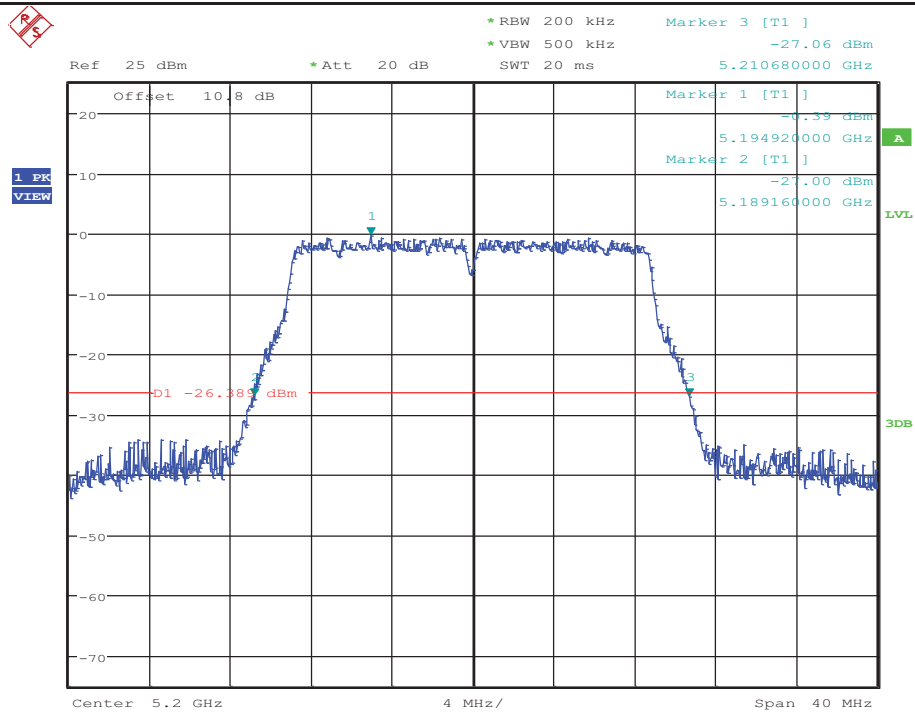
Date: 26.JUN.2017 21:02:26

Emission Bandwidth Measurement_11N20MIMO_5180_Ant2



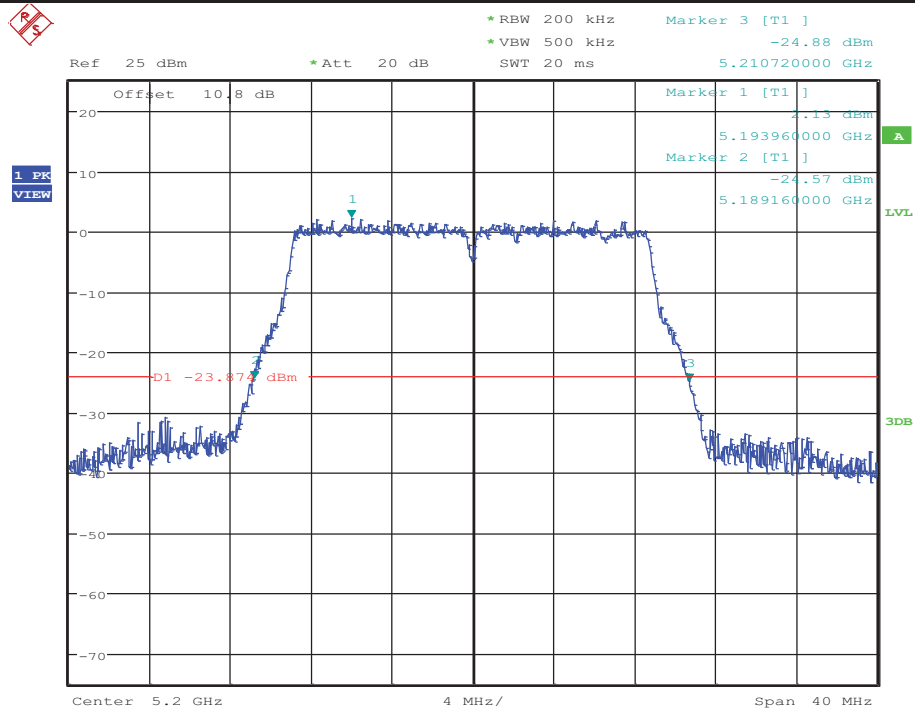
Date: 26.JUN.2017 21:05:16

Emission Bandwidth Measurement_11N20MIMO_5200_Ant1



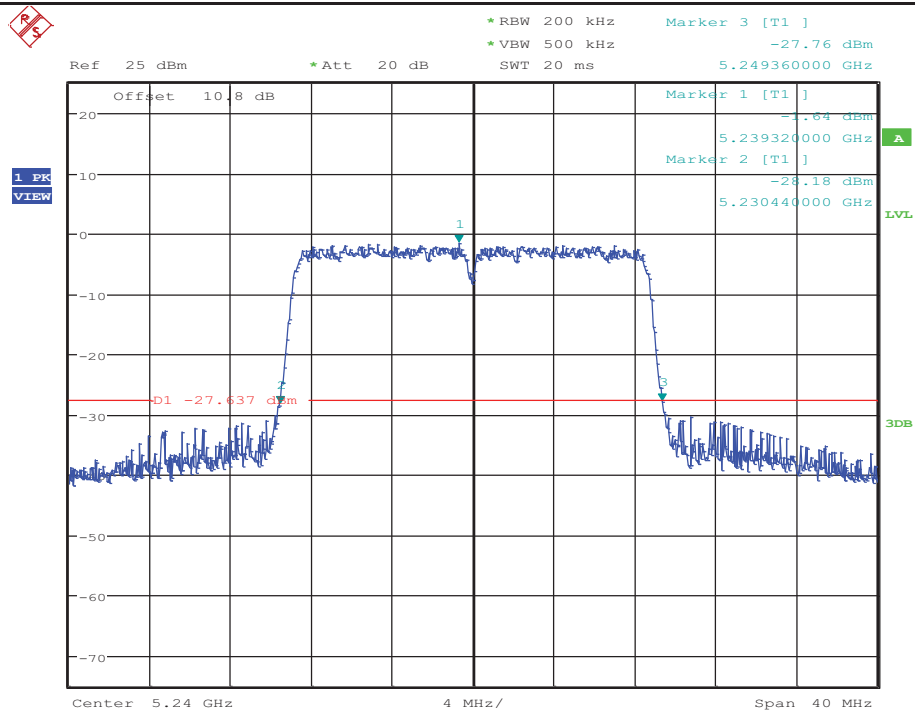
Date: 26.JUN.2017 21:08:51

Emission Bandwidth Measurement_11N20MIMO_5200_Ant2



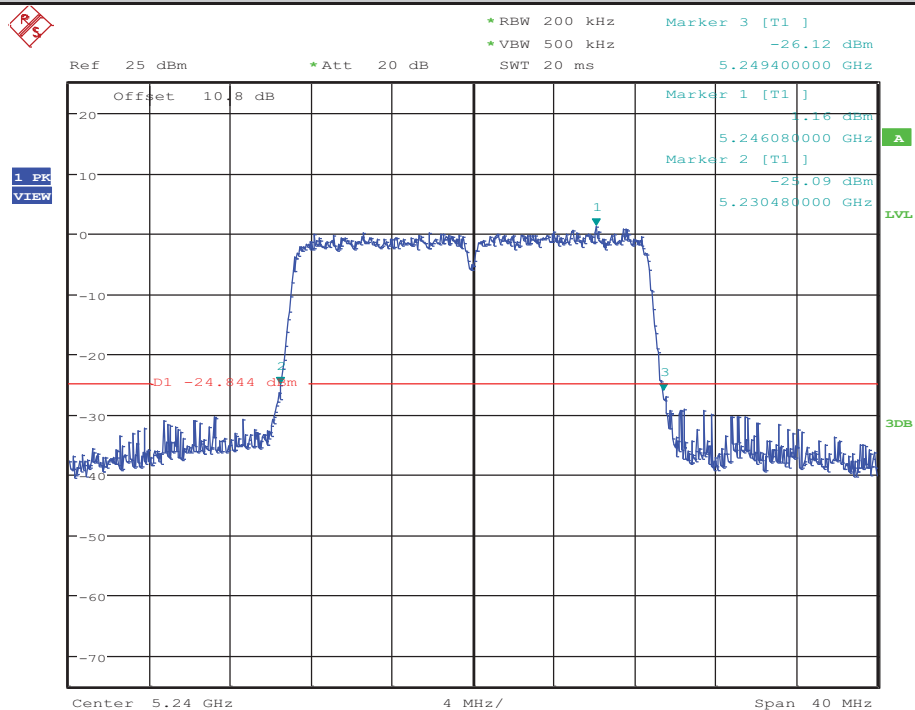
Date: 26.JUN.2017 21:11:41

Emission Bandwidth Measurement_11N20MIMO_5240_Ant1



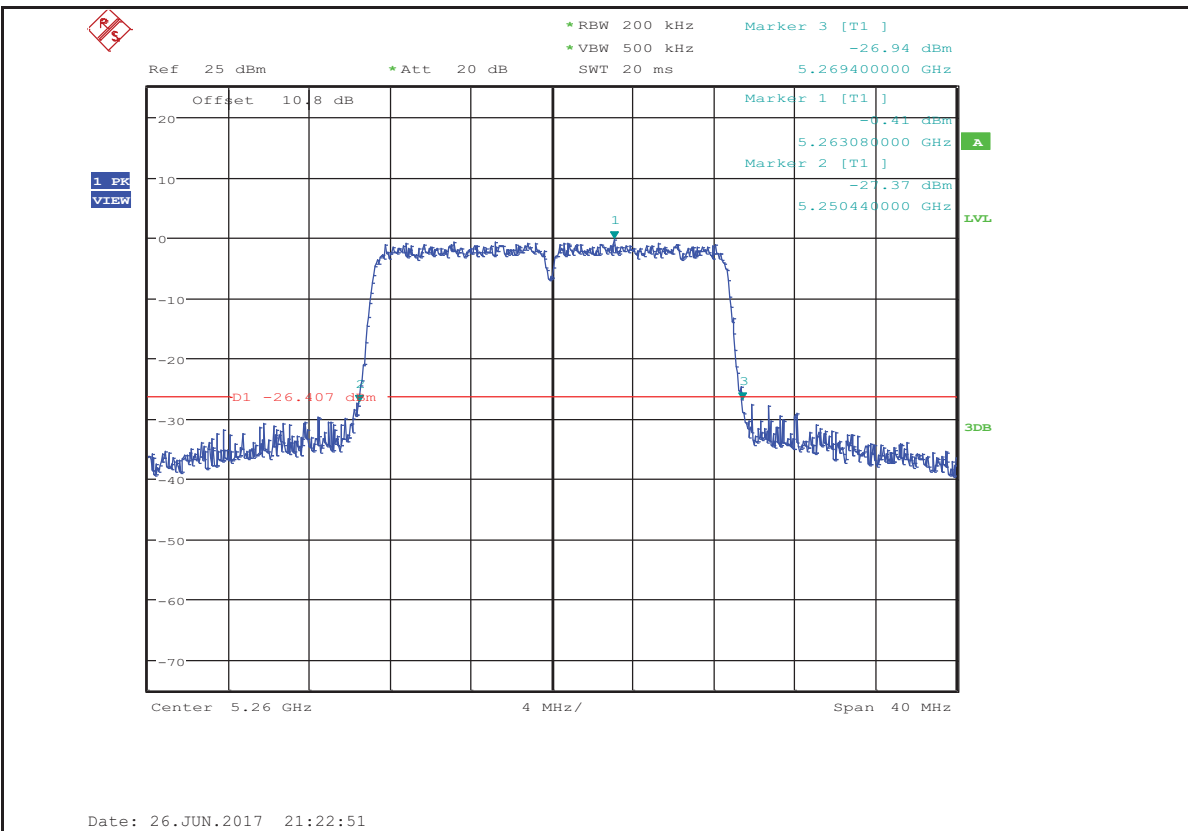
Date: 26.JUN.2017 21:16:24

Emission Bandwidth Measurement_11N20MIMO_5240_Ant2

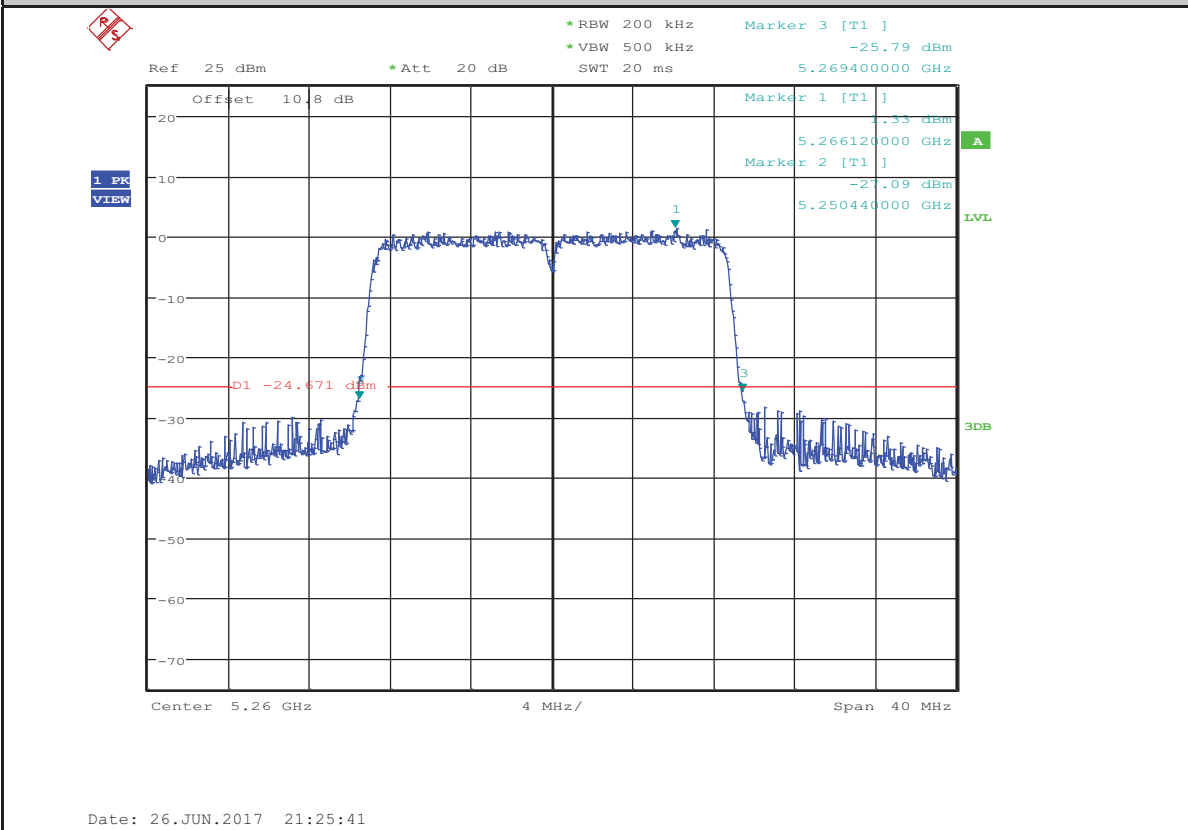


Date: 26.JUN.2017 21:19:14

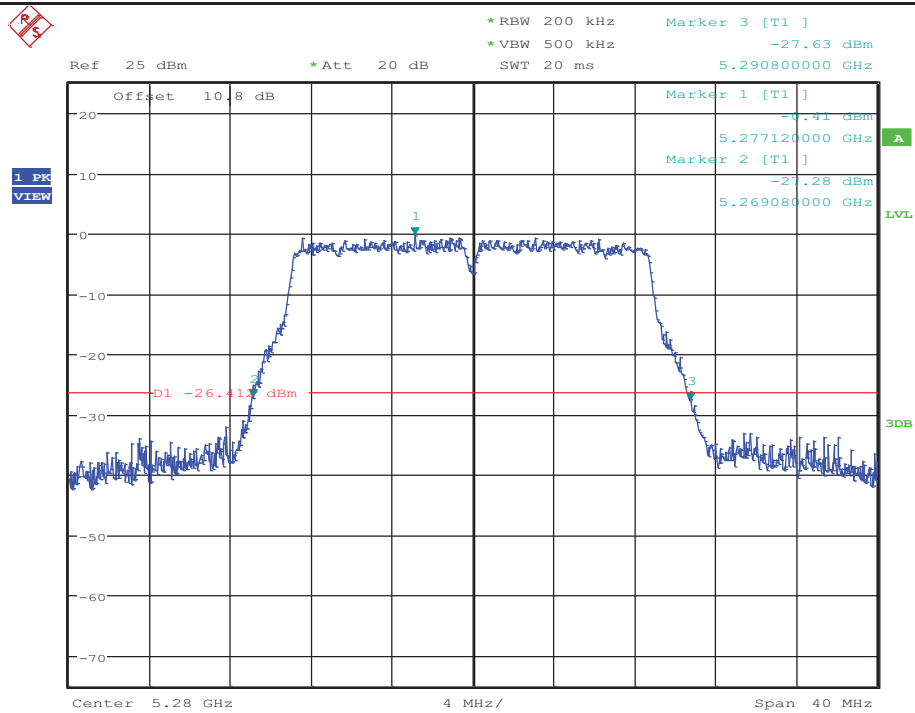
Emission Bandwidth Measurement_11N20MIMO_5260_Ant1



Emission Bandwidth Measurement_11N20MIMO_5260_Ant2

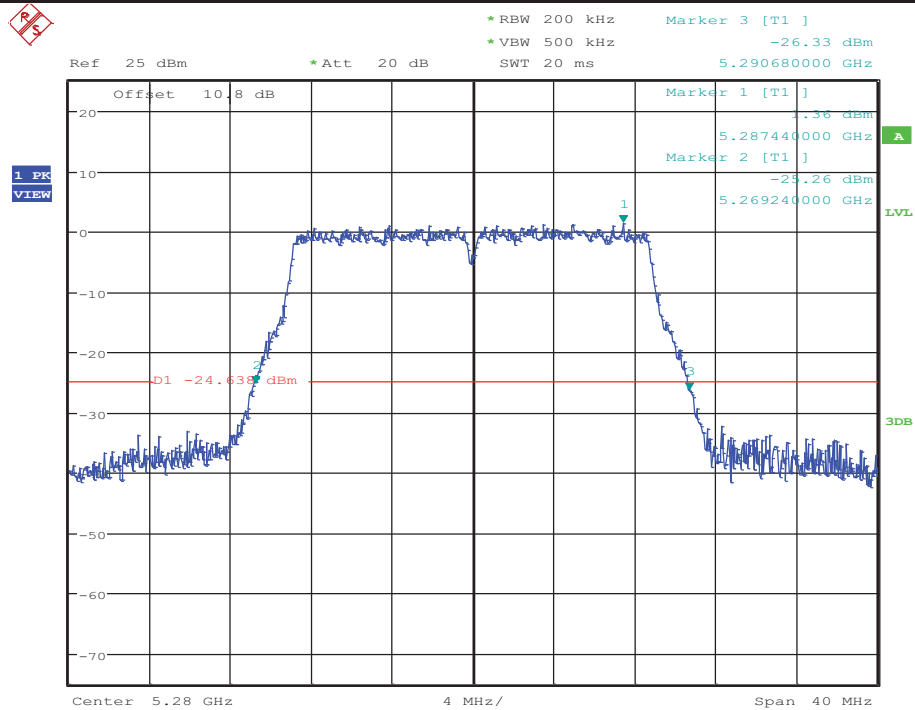


Emission Bandwidth Measurement_11N20MIMO_5280_Ant1



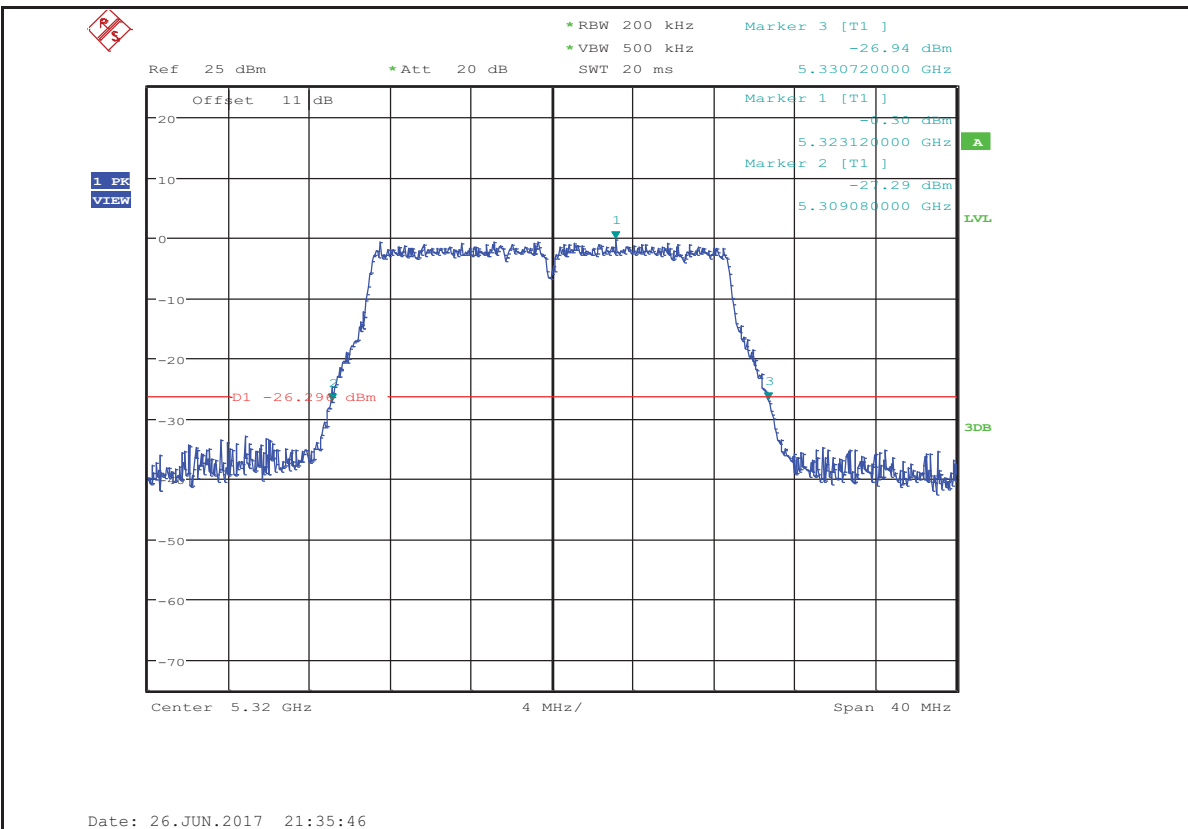
Date: 26.JUN.2017 21:29:15

Emission Bandwidth Measurement_11N20MIMO_5280_Ant2

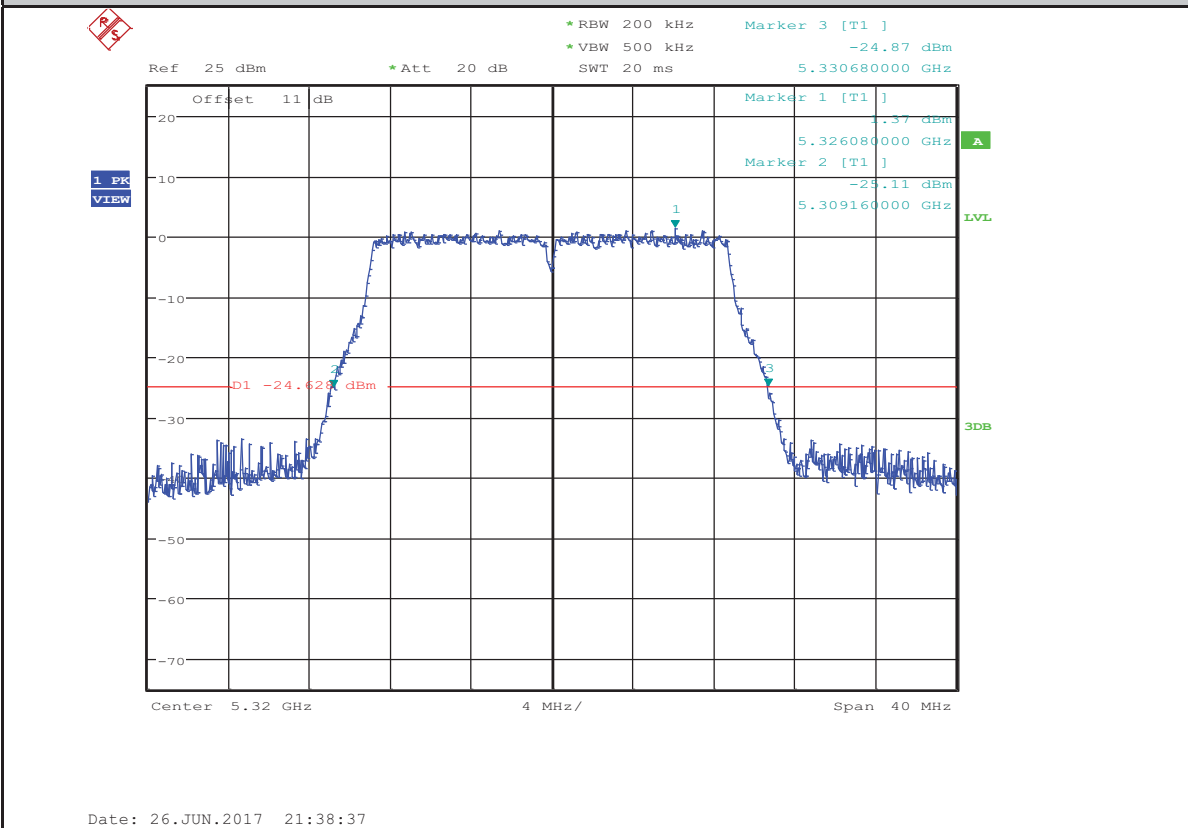


Date: 26.JUN.2017 21:32:06

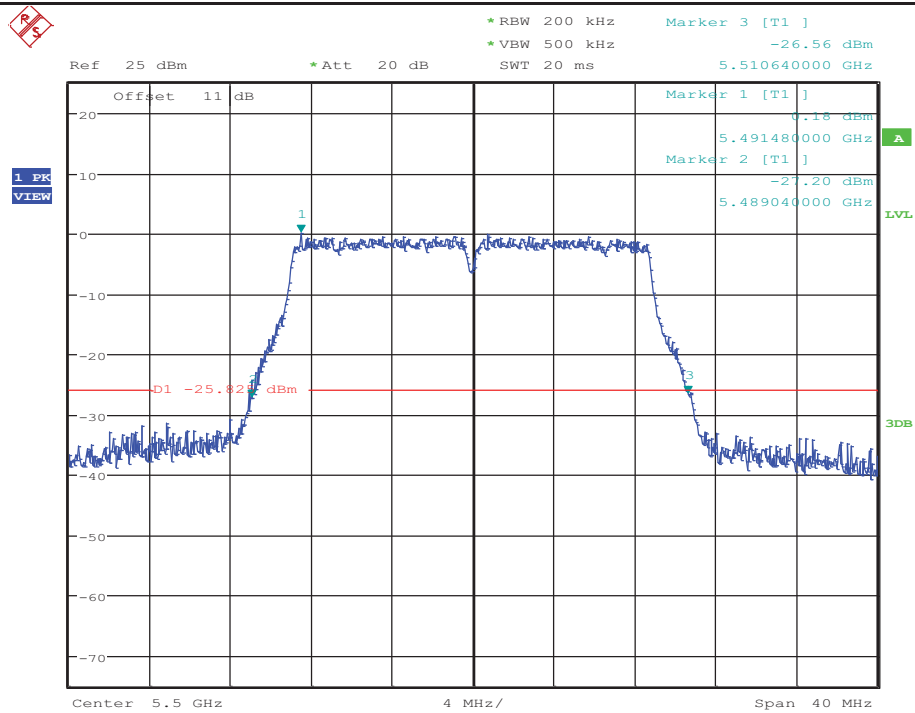
Emission Bandwidth Measurement_11N20MIMO_5320_Ant1



Emission Bandwidth Measurement_11N20MIMO_5320_Ant2

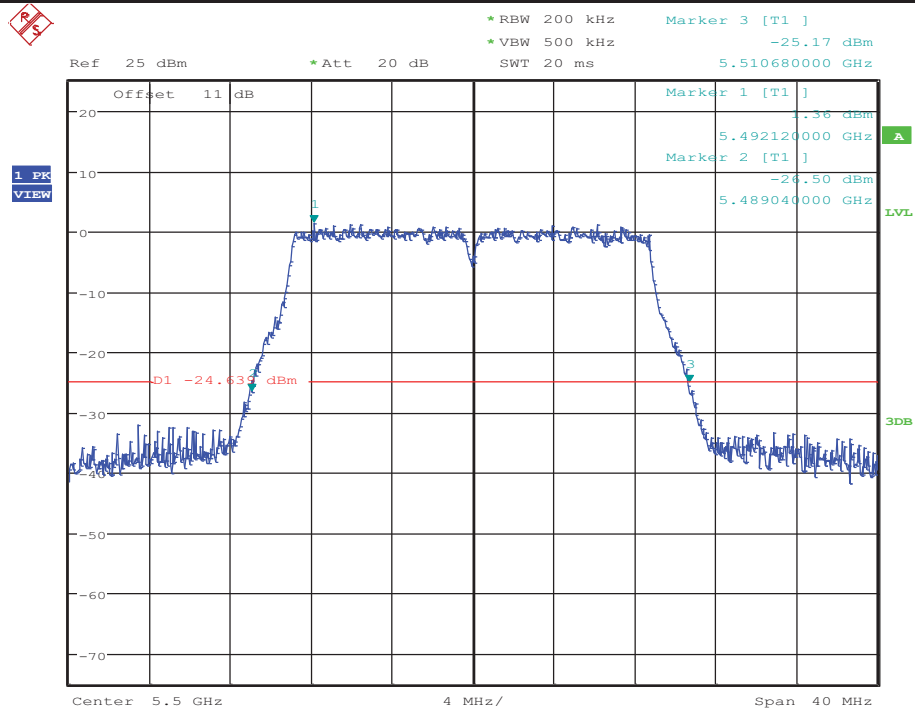


Emission Bandwidth Measurement_11N20MIMO_5500_Ant1



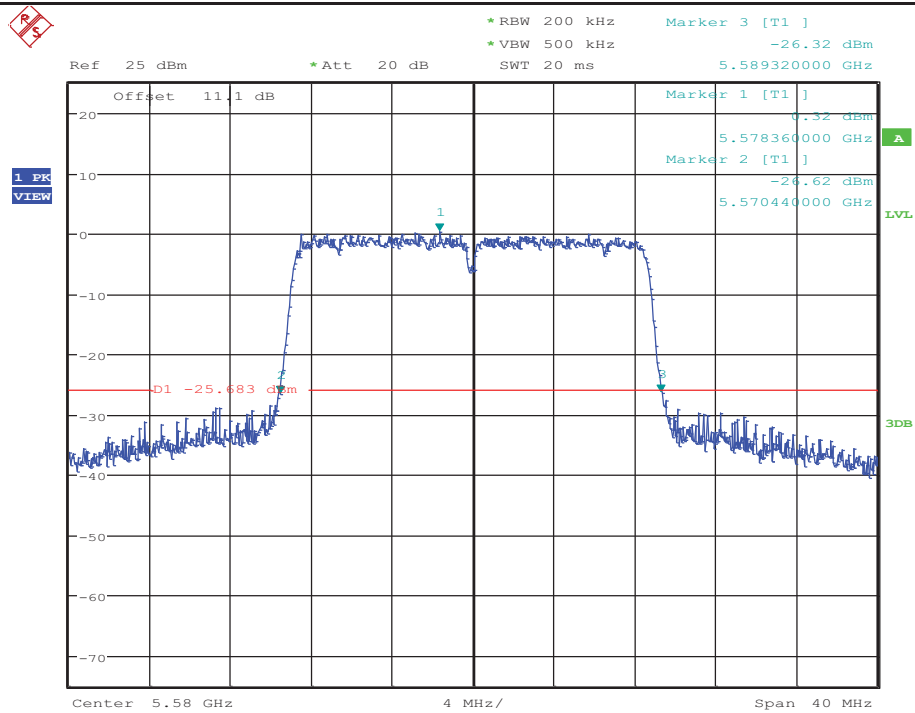
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Emission Bandwidth Measurement_11N20MIMO_5500_Ant2



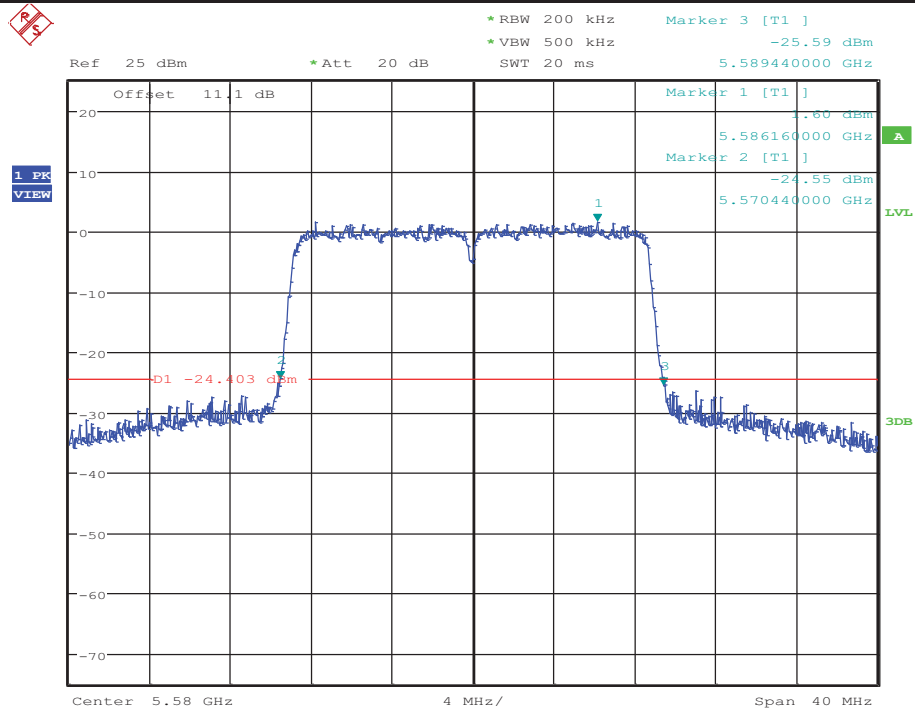
Date: 26.JUN.2017 21:45:05

Emission Bandwidth Measurement_11N20MIMO_5580_Ant1



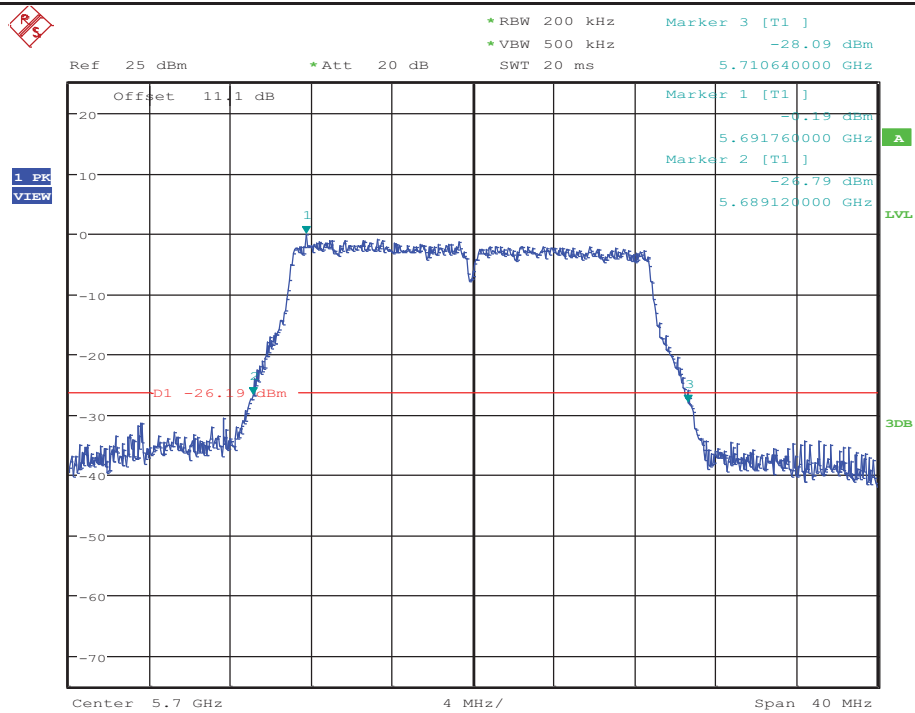
Date: 26.JUN.2017 21:48:41

Emission Bandwidth Measurement_11N20MIMO_5580_Ant2



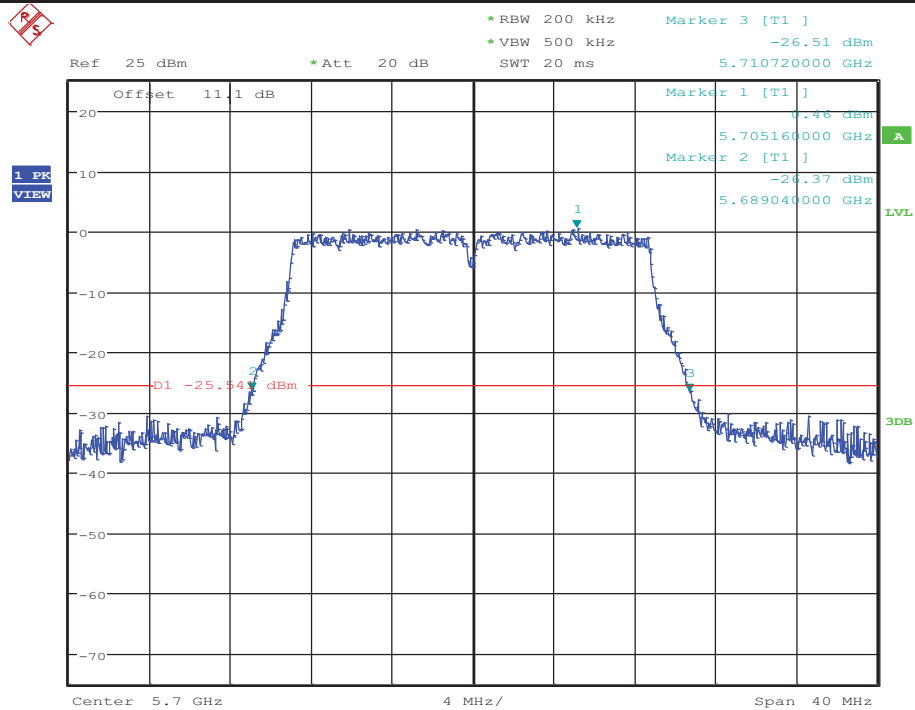
Date: 26.JUN.2017 21:51:32

Emission Bandwidth Measurement_11N20MIMO_5700_Ant1



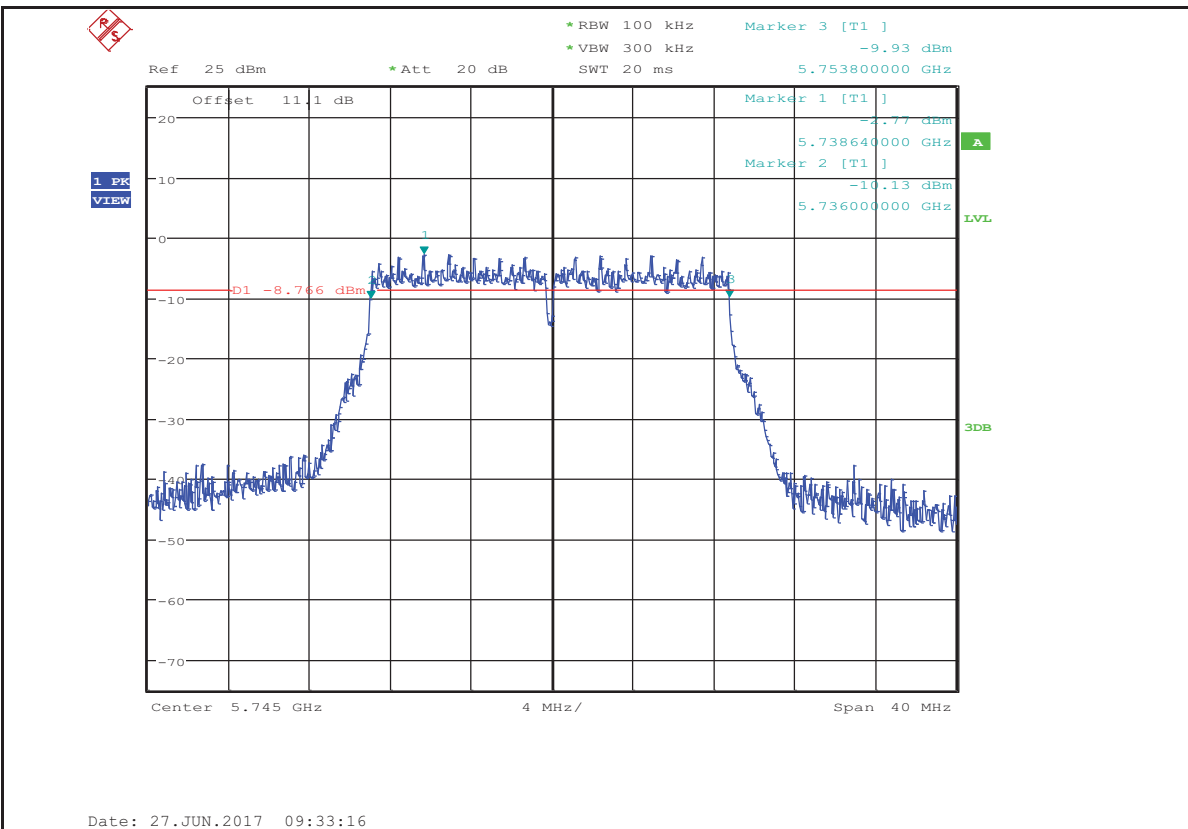
Date: 26.JUN.2017 21:55:18

Emission Bandwidth Measurement_11N20MIMO_5700_Ant2

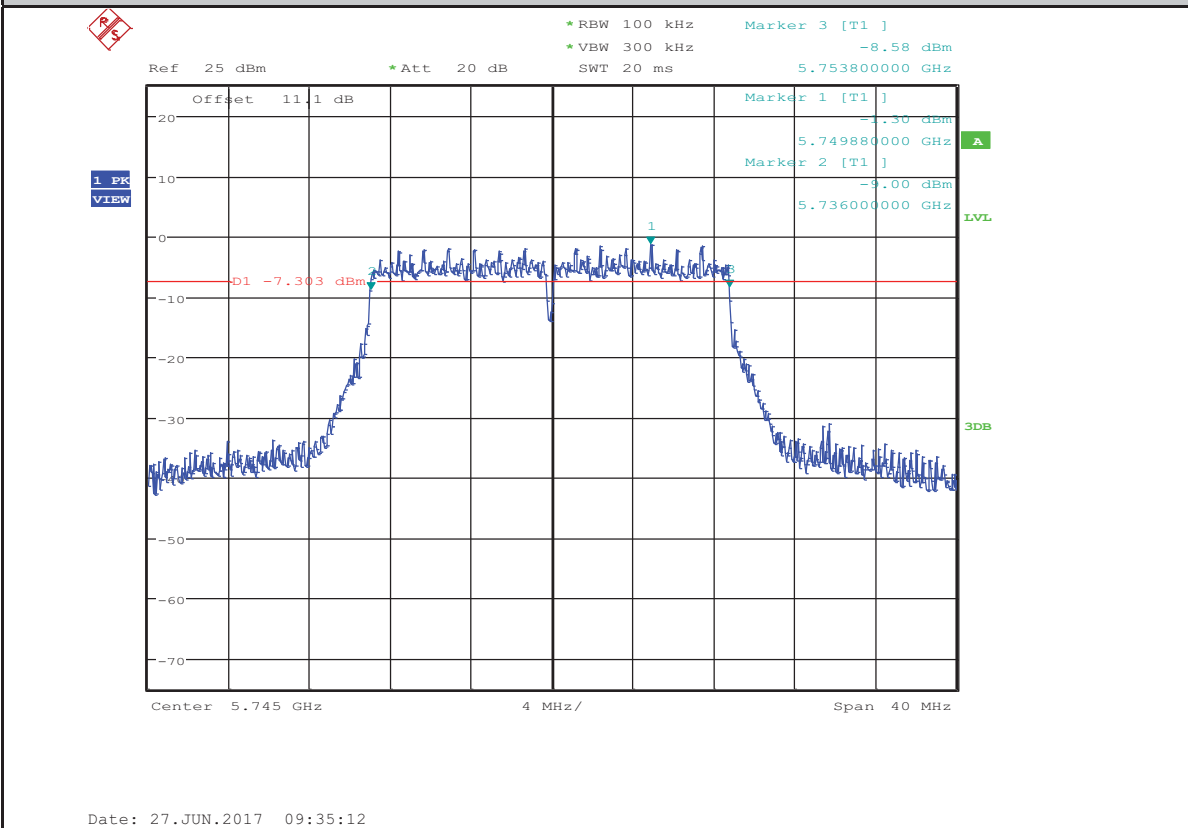


Date: 26.JUN.2017 21:58:09

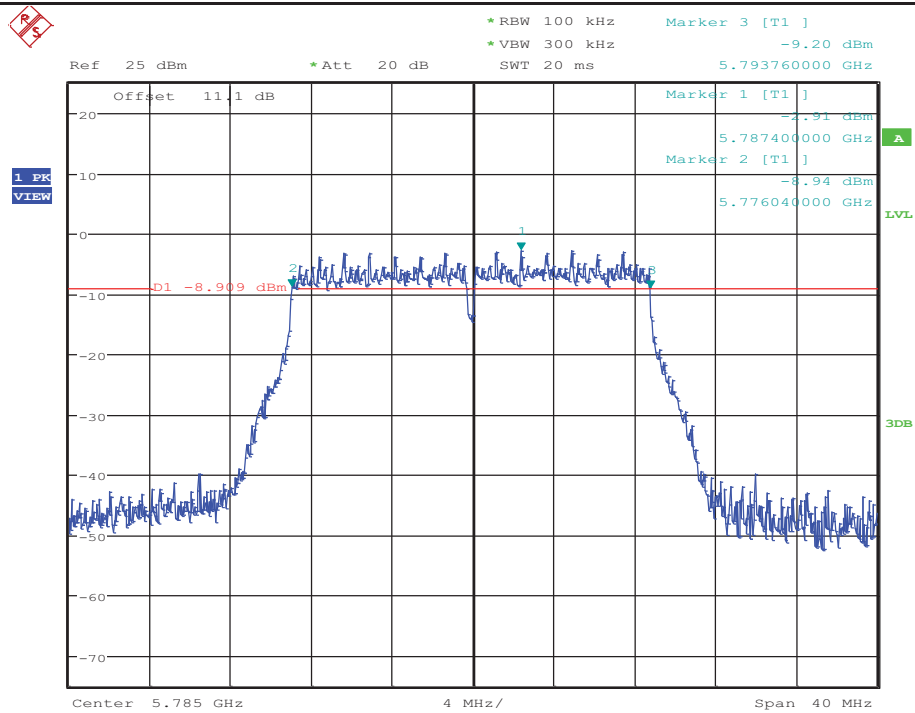
Emission Bandwidth Measurement_11N20MIMO_5745_Ant1



Emission Bandwidth Measurement_11N20MIMO_5745_Ant2

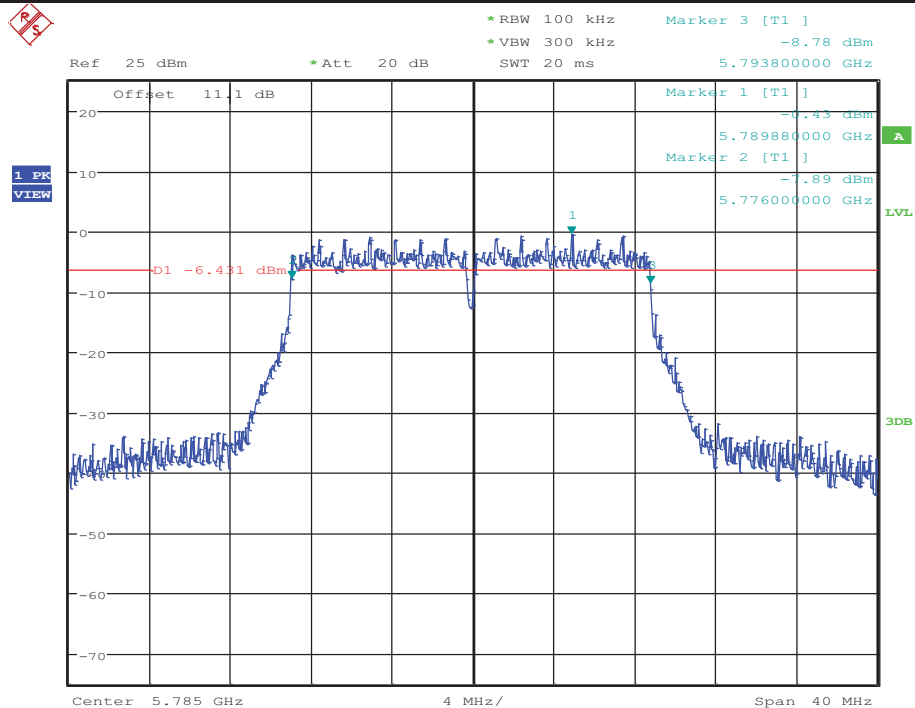


Emission Bandwidth Measurement_11N20MIMO_5785_Ant1



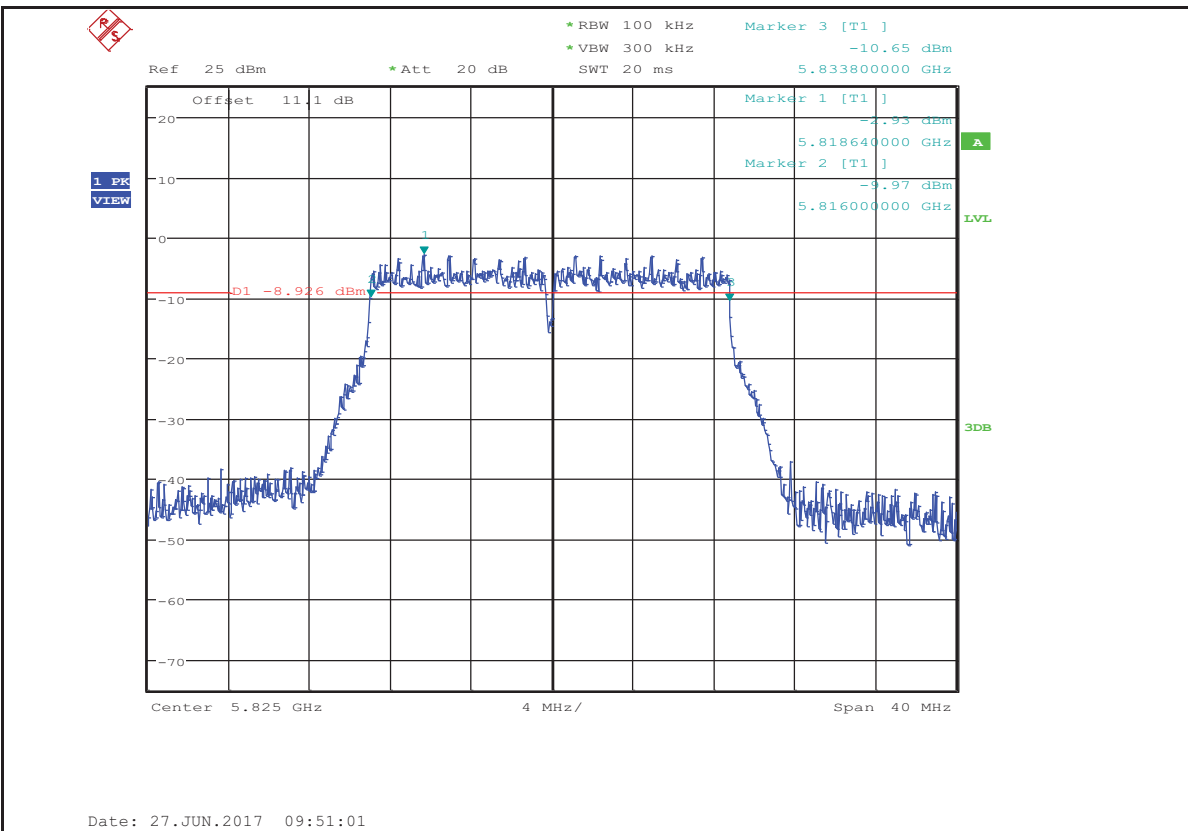
Date: 27.JUN.2017 09:38:19

Emission Bandwidth Measurement_11N20MIMO_5785_Ant2

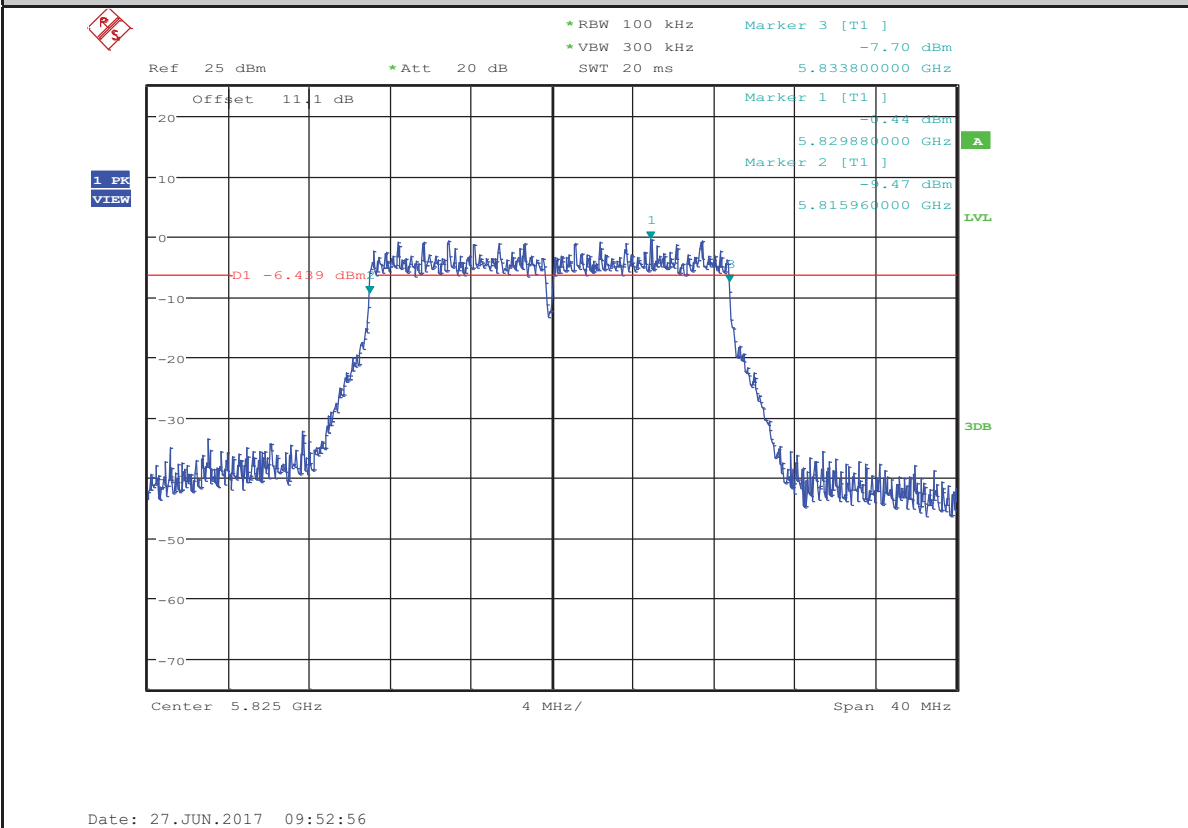


Date: 27.JUN.2017 09:40:14

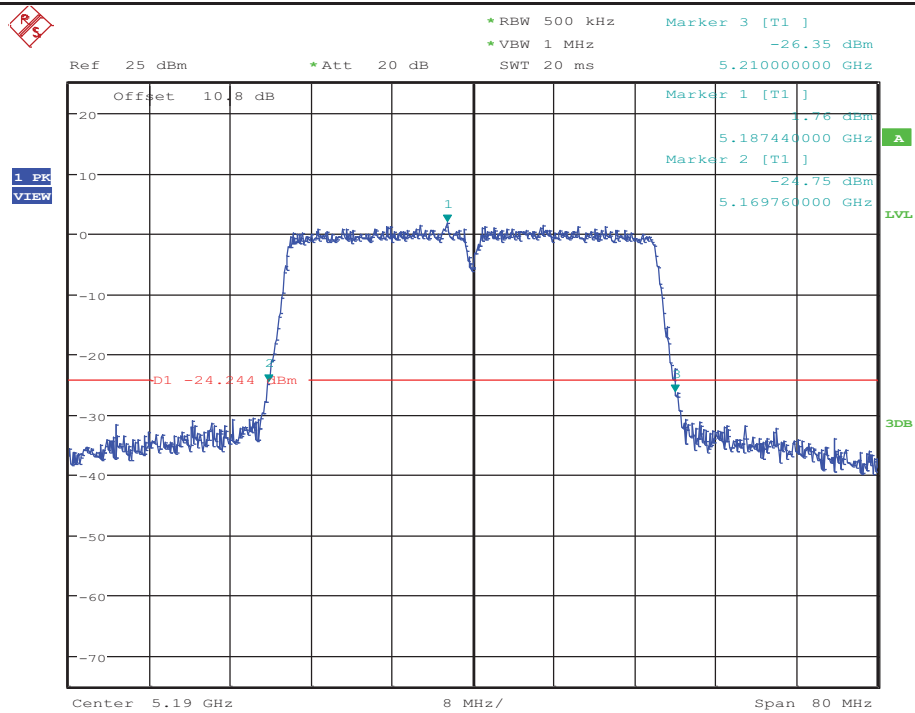
Emission Bandwidth Measurement_11N20MIMO_5825_Ant1



Emission Bandwidth Measurement_11N20MIMO_5825_Ant2

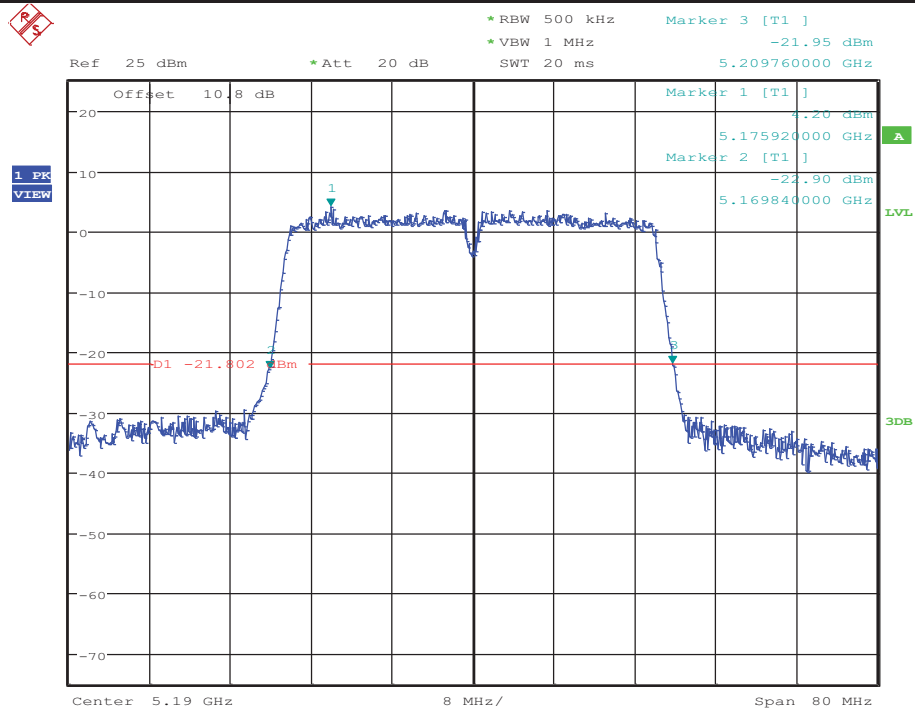


Emission Bandwidth Measurement_11N40MIMO_5190_Ant1



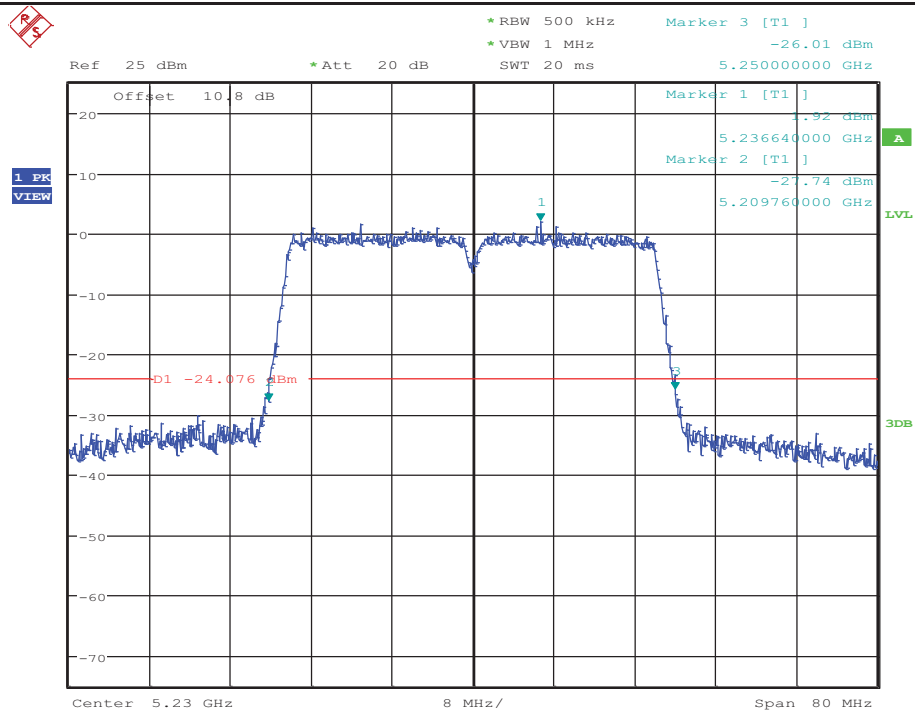
Date: 27.JUN.2017 10:04:23

Emission Bandwidth Measurement_11N40MIMO_5190_Ant2



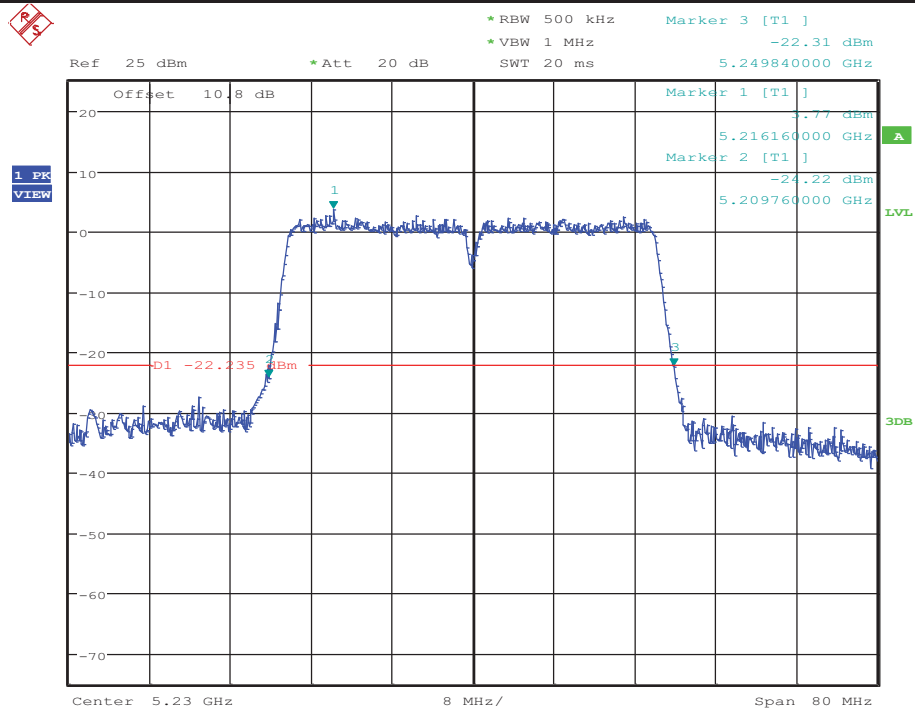
Date: 27.JUN.2017 10:06:42

Emission Bandwidth Measurement_11N40MIMO_5230_Ant1



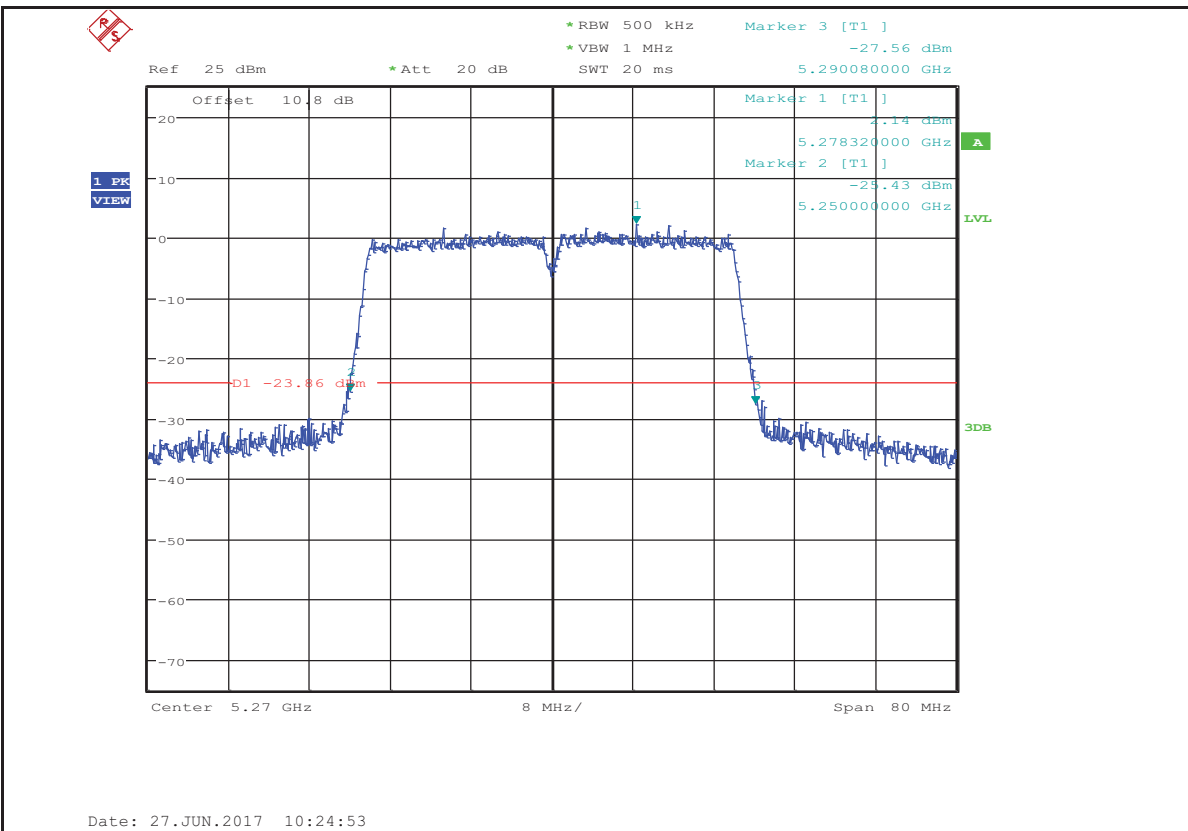
Date: 27.JUN.2017 10:12:17

Emission Bandwidth Measurement_11N40MIMO_5230_Ant2

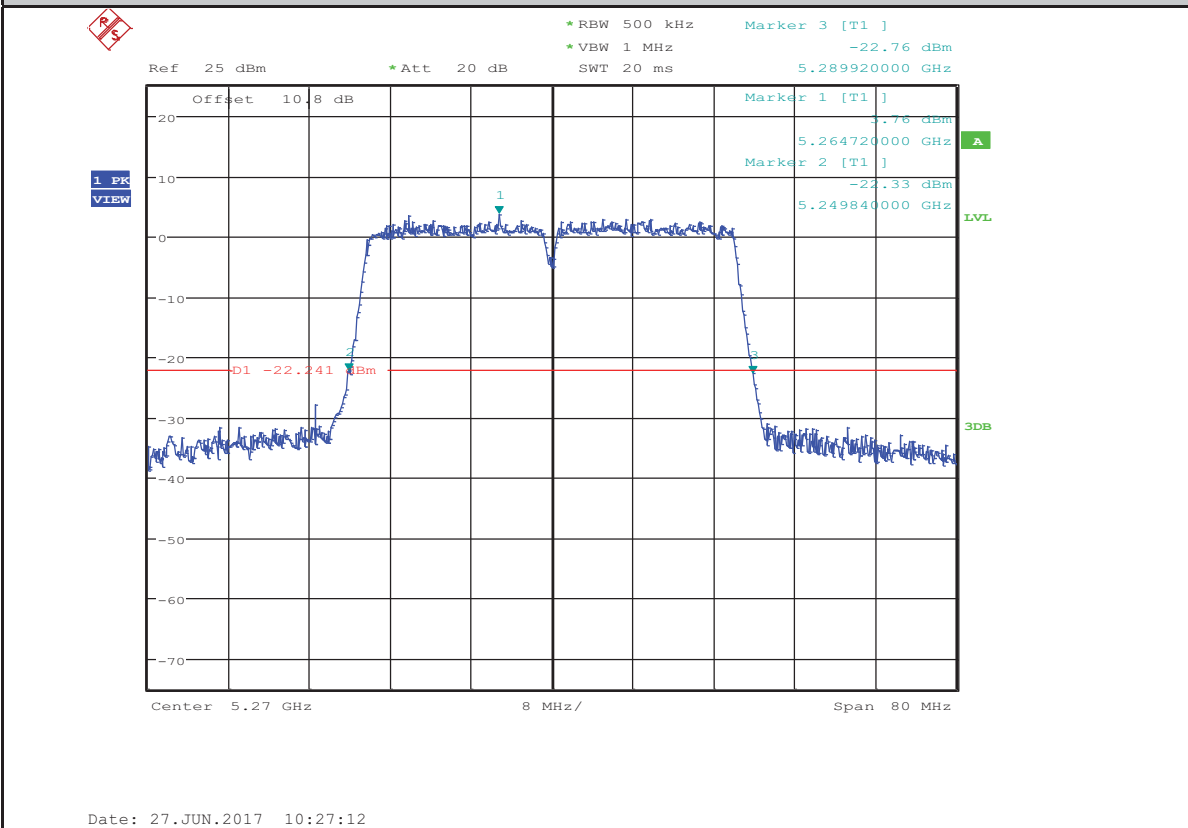


Date: 27.JUN.2017 10:14:36

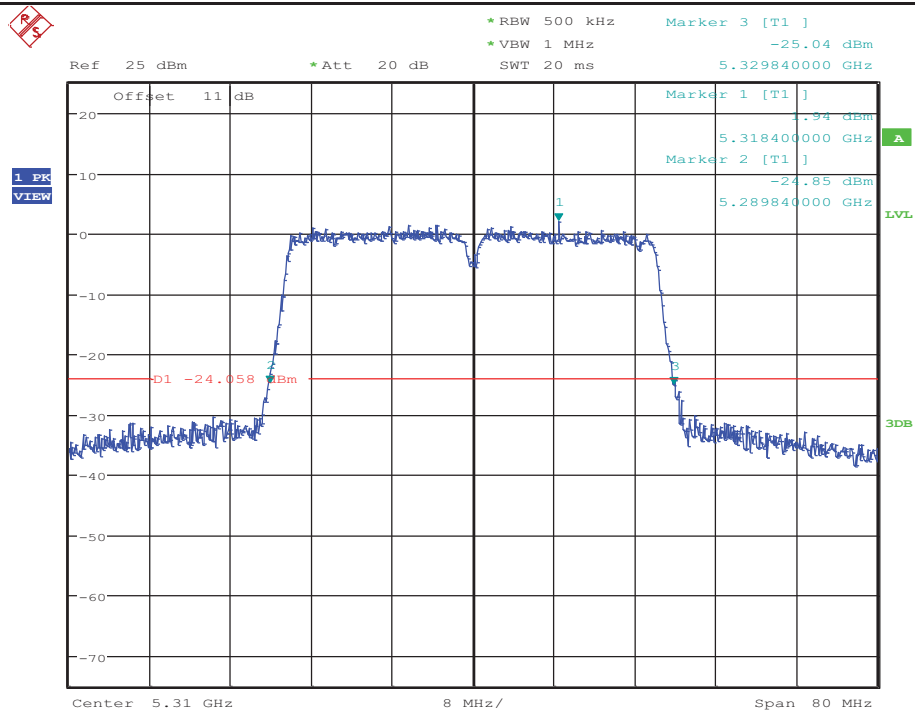
Emission Bandwidth Measurement_11N40MIMO_5270_Ant1



Emission Bandwidth Measurement_11N40MIMO_5270_Ant2

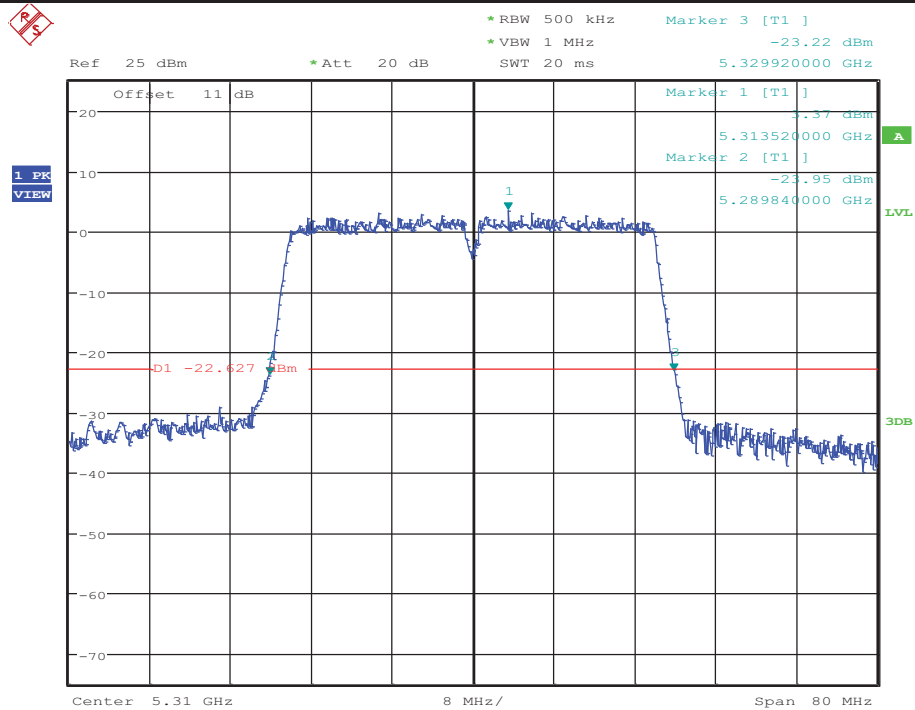


Emission Bandwidth Measurement_11N40MIMO_5310_Ant1



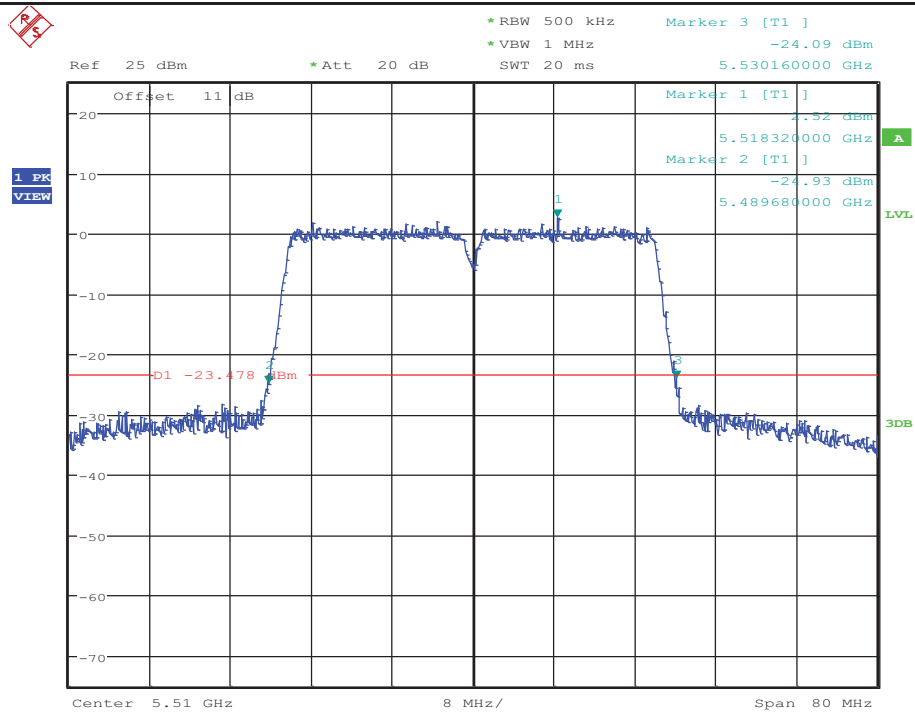
Date: 27.JUN.2017 10:32:23

Emission Bandwidth Measurement_11N40MIMO_5310_Ant2



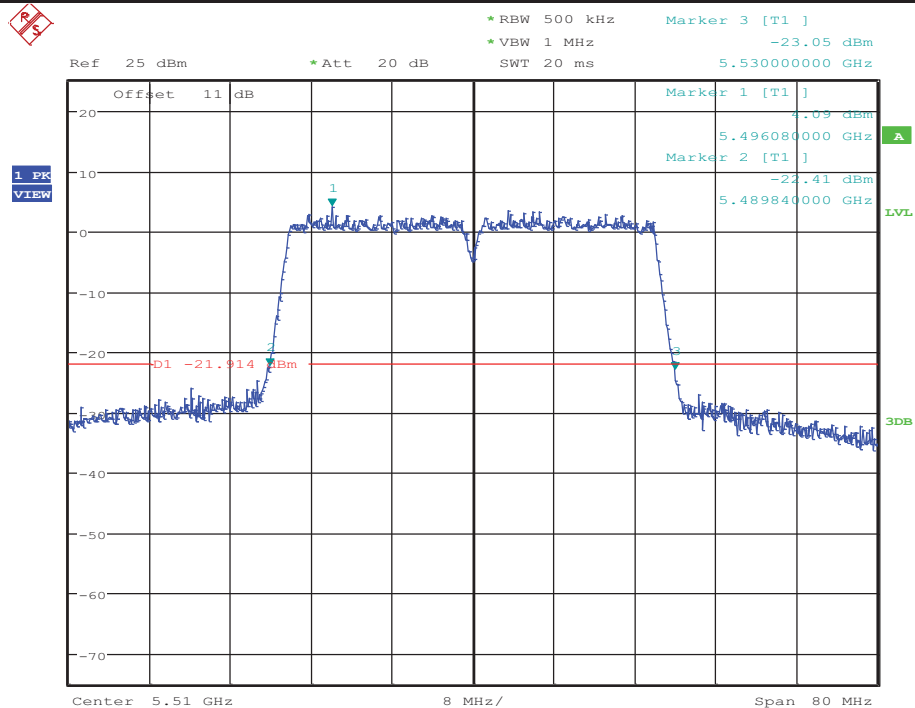
Date: 27.JUN.2017 10:34:42

Emission Bandwidth Measurement_11N40MIMO_5510_Ant1



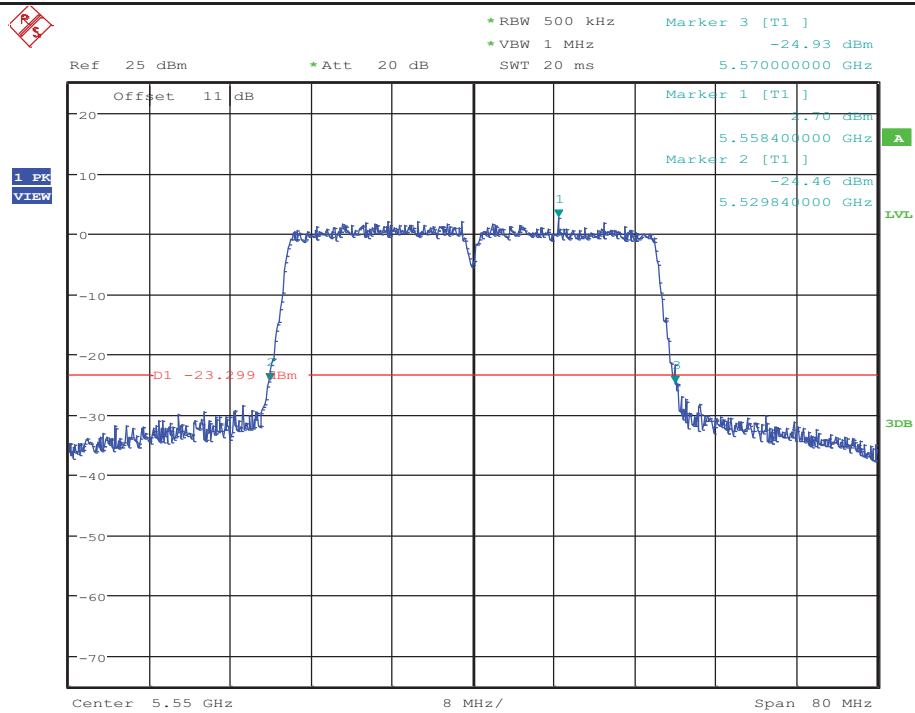
Date: 27.JUN.2017 10:38:01

Emission Bandwidth Measurement_11N40MIMO_5510_Ant2



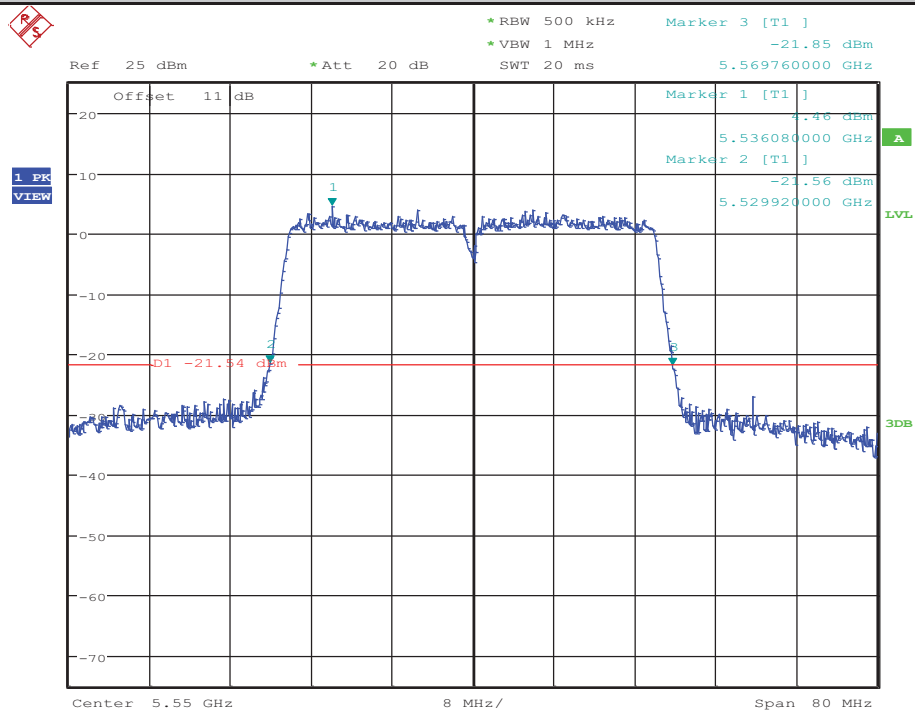
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Emission Bandwidth Measurement_11N40MIMO_5550_Ant1



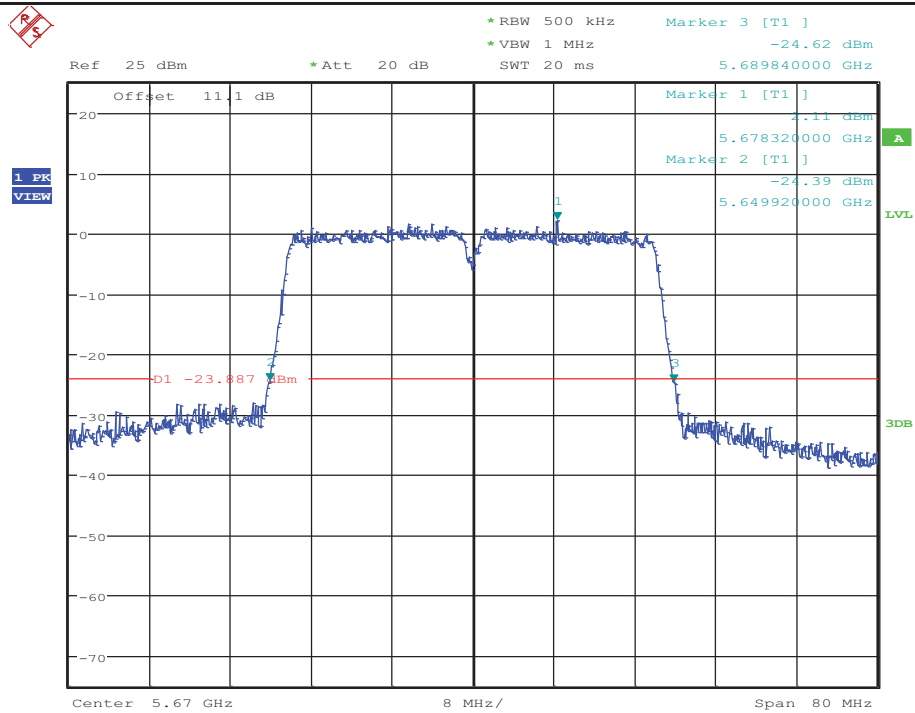
Date: 27.JUN.2017 10:43:39

Emission Bandwidth Measurement_11N40MIMO_5550_Ant2



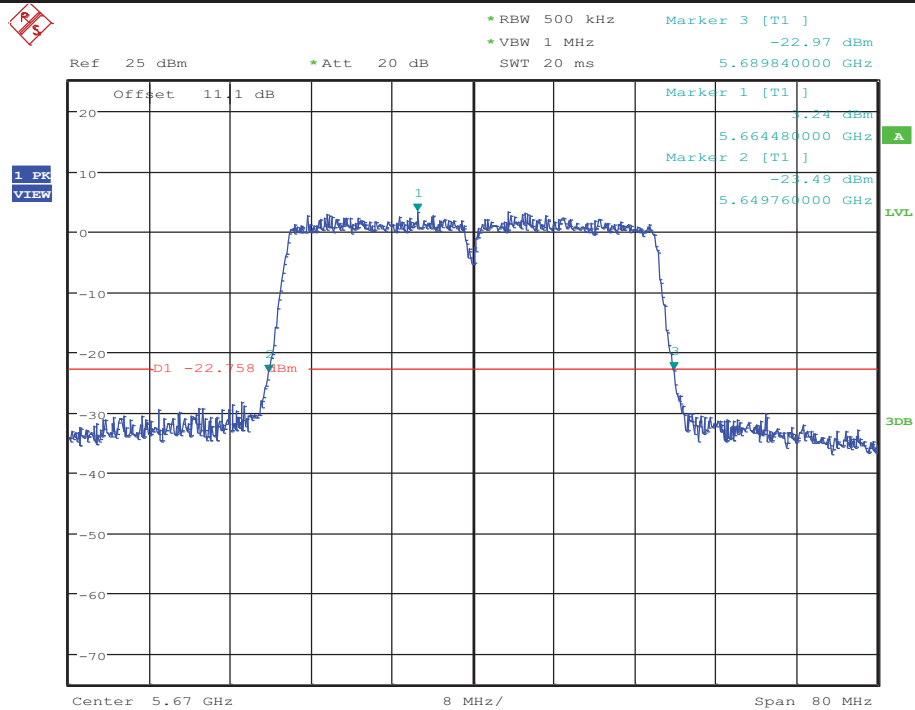
Date: 27.JUN.2017 10:45:58

Emission Bandwidth Measurement_11N40MIMO_5670_Ant1



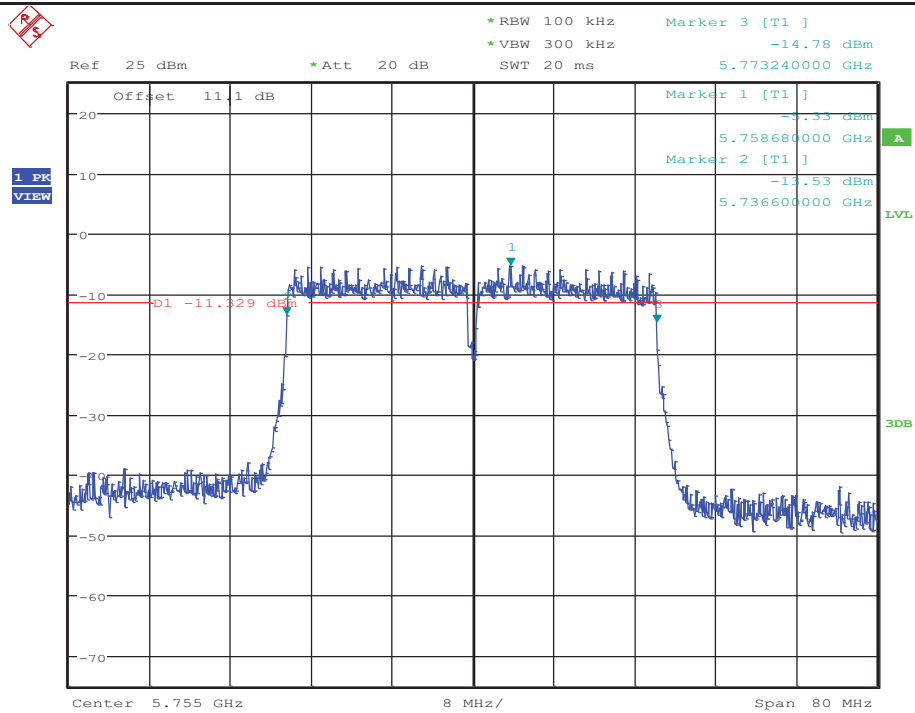
Date: 27.JUN.2017 10:49:01

Emission Bandwidth Measurement_11N40MIMO_5670_Ant2



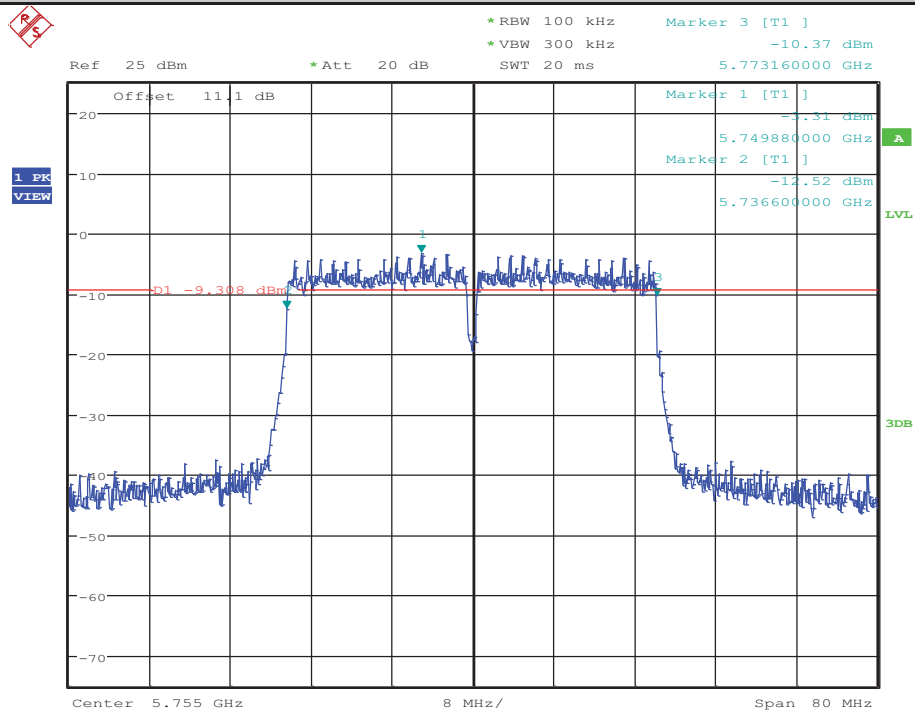
Date: 27.JUN.2017 10:51:20

Emission Bandwidth Measurement_11N40MIMO_5755_Ant1



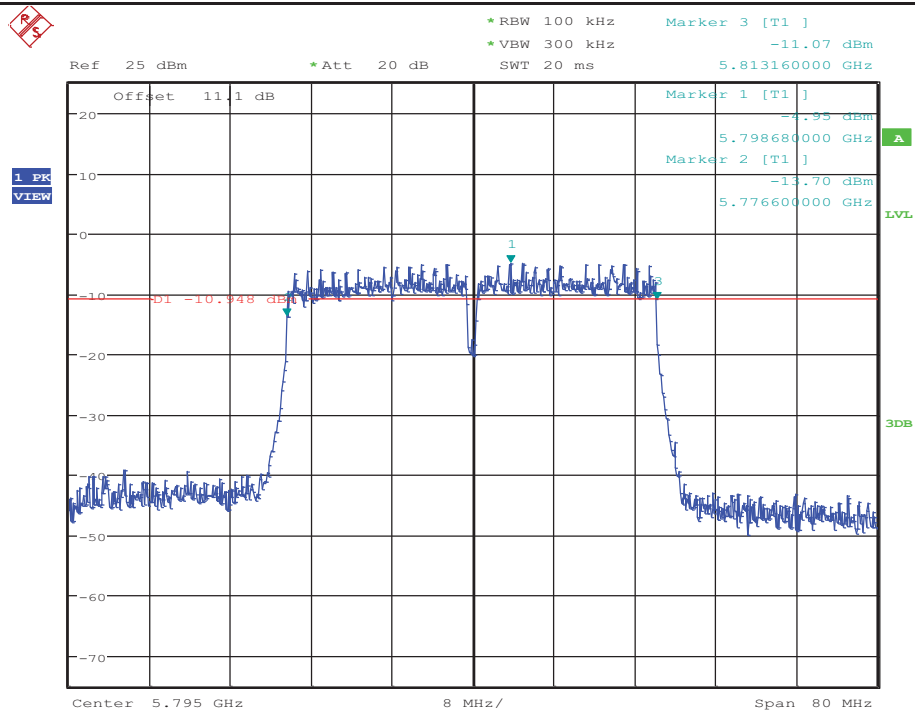
Date: 27.JUN.2017 10:54:54

Emission Bandwidth Measurement_11N40MIMO_5755_Ant2



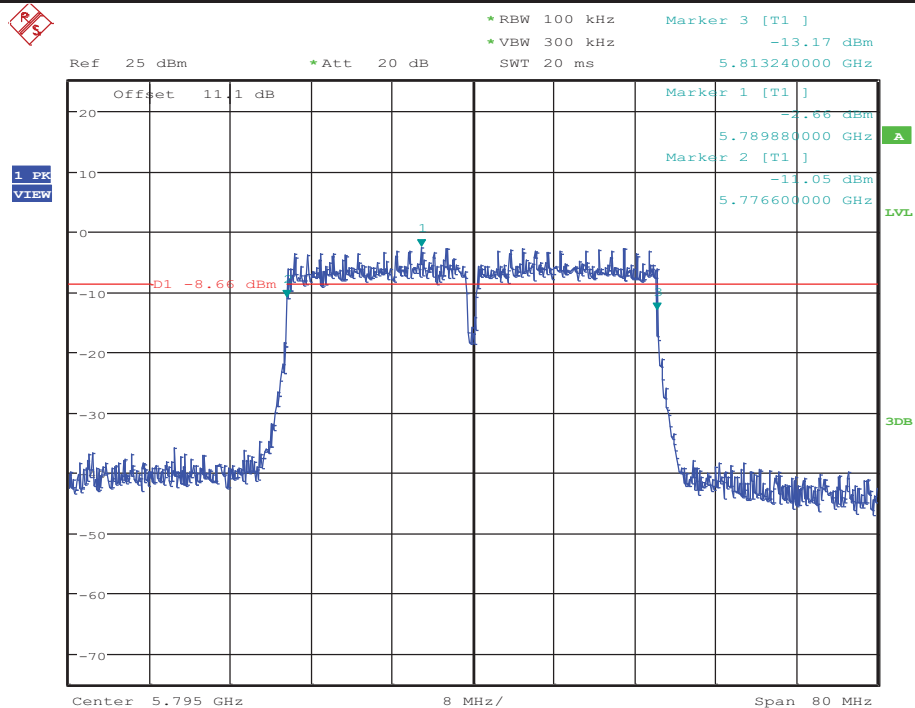
Date: 27.JUN.2017 10:57:14

Emission Bandwidth Measurement_11N40MIMO_5795_Ant1



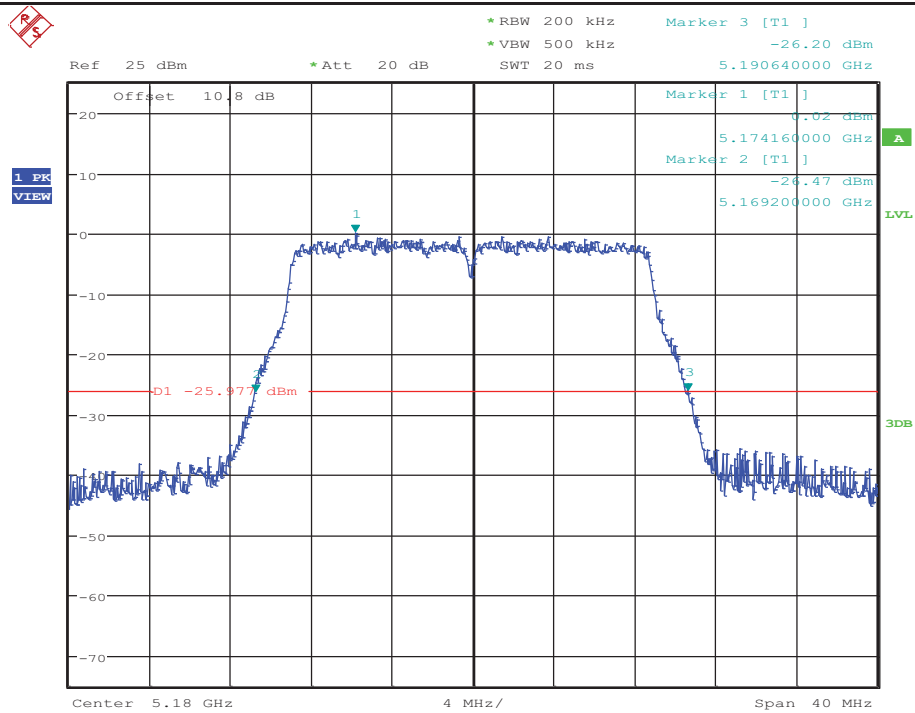
Date: 27.JUN.2017 11:00:20

Emission Bandwidth Measurement_11N40MIMO_5795_Ant2



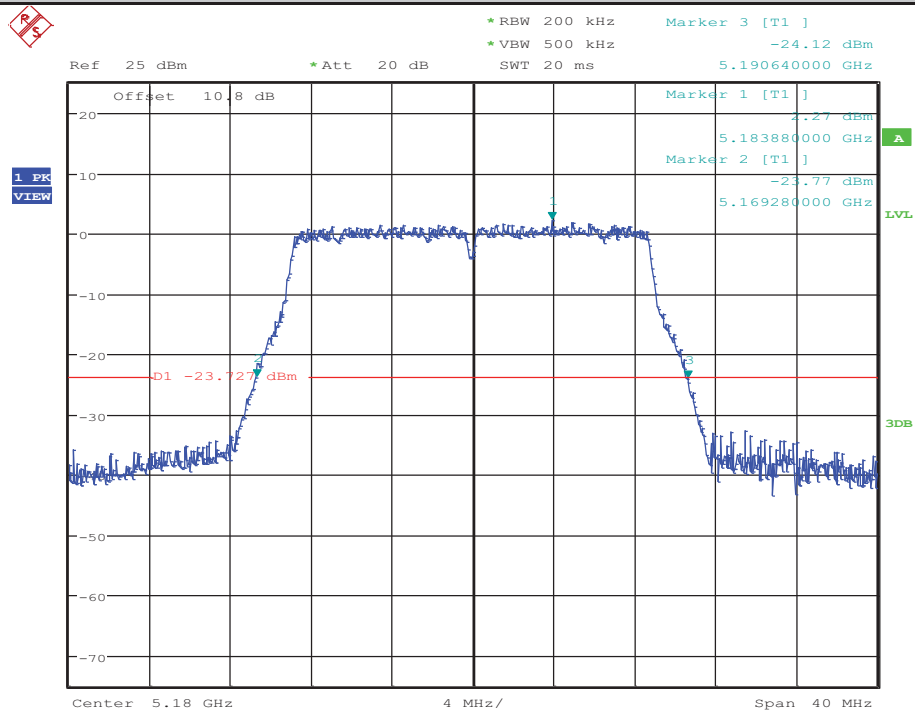
Date: 27.JUN.2017 11:02:39

Emission Bandwidth Measurement_11AC20MIMO_5180_Ant1



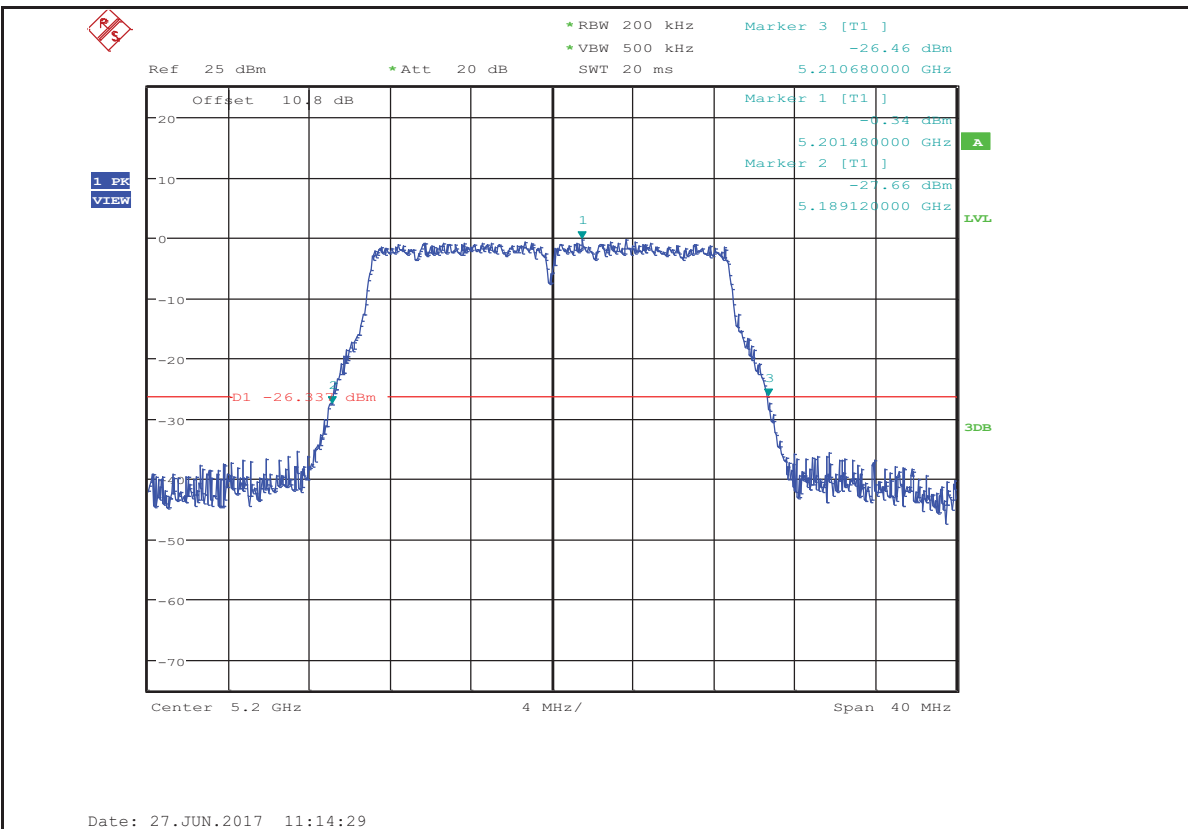
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Emission Bandwidth Measurement_11AC20MIMO_5180_Ant2

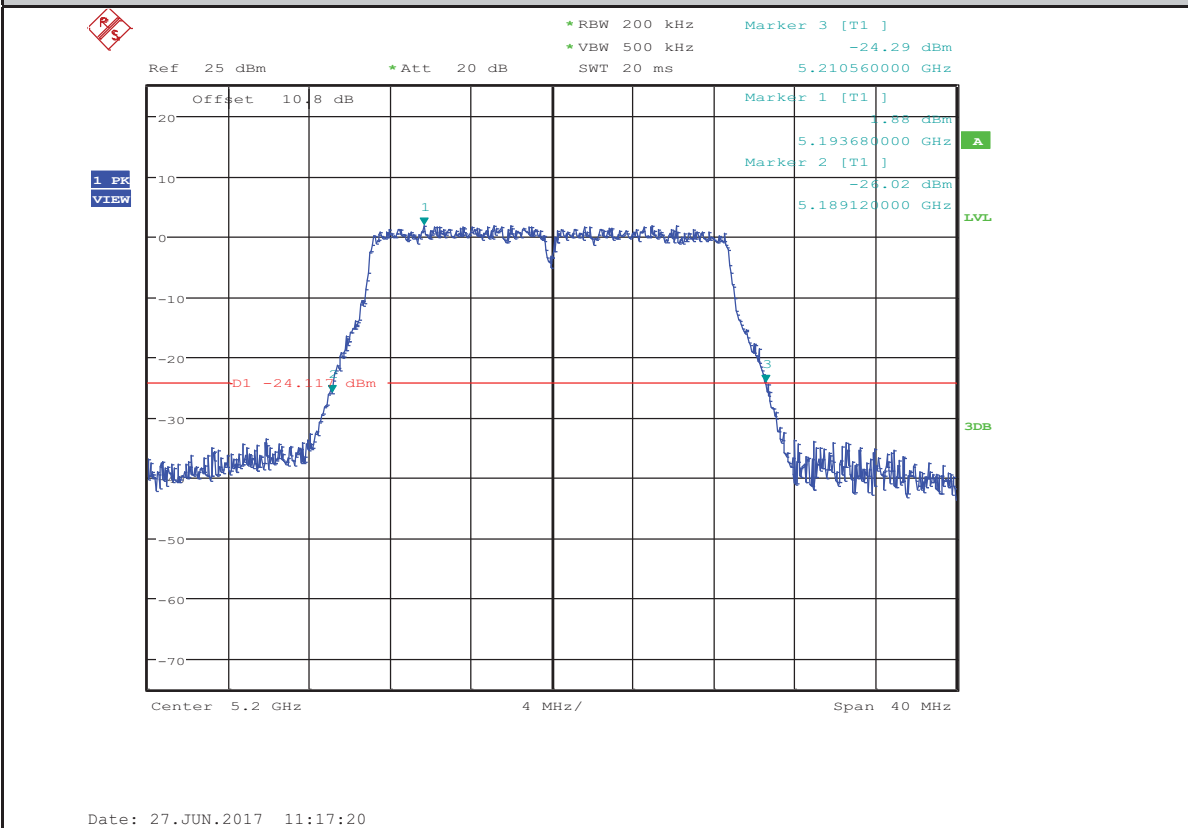


Date: 27.JUN.2017 11:10:30

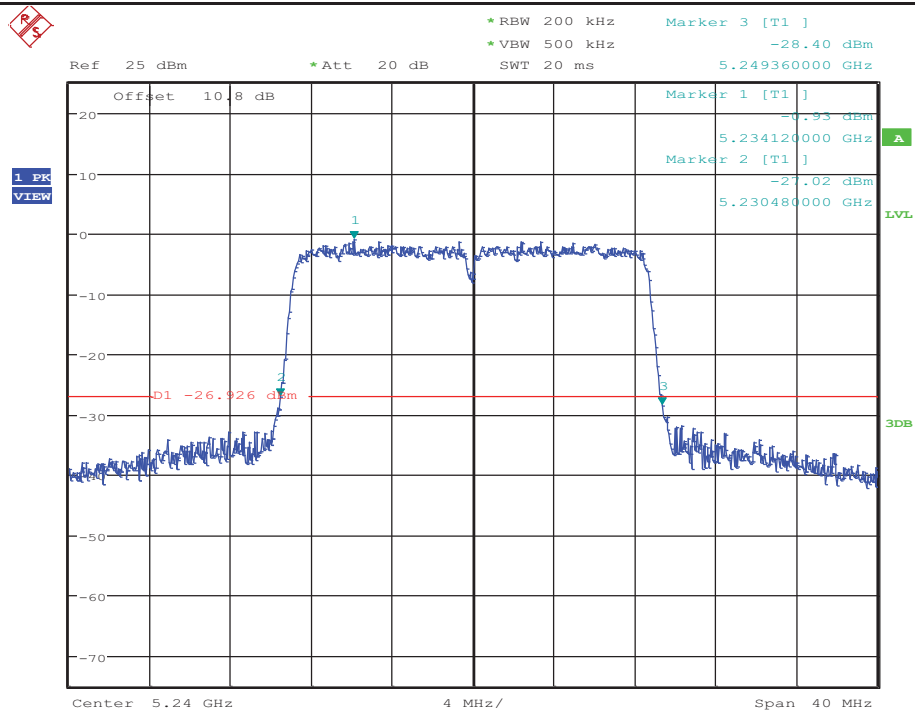
Emission Bandwidth Measurement_11AC20MIMO_5200_Ant1



Emission Bandwidth Measurement_11AC20MIMO_5200_Ant2

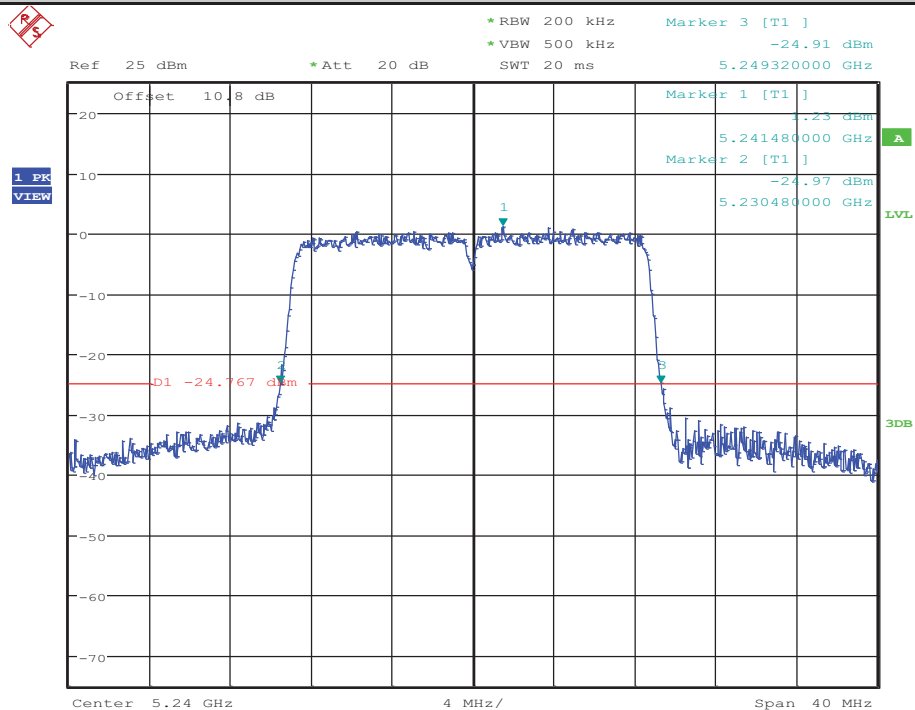


Emission Bandwidth Measurement_11AC20MIMO_5240_Ant1



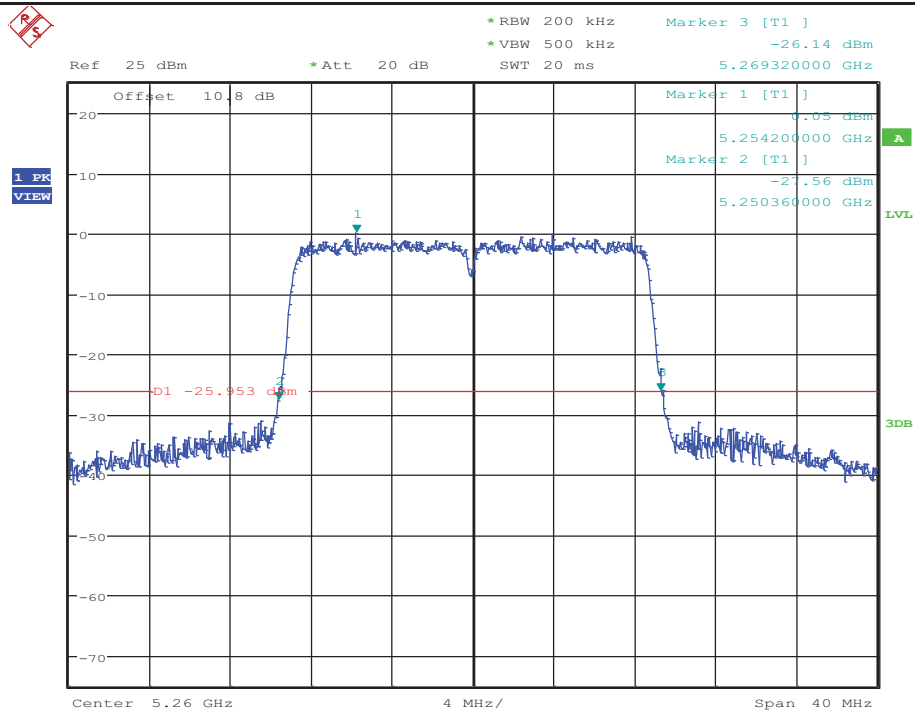
Date: 27.JUN.2017 11:21:17

Emission Bandwidth Measurement_11AC20MIMO_5240_Ant2



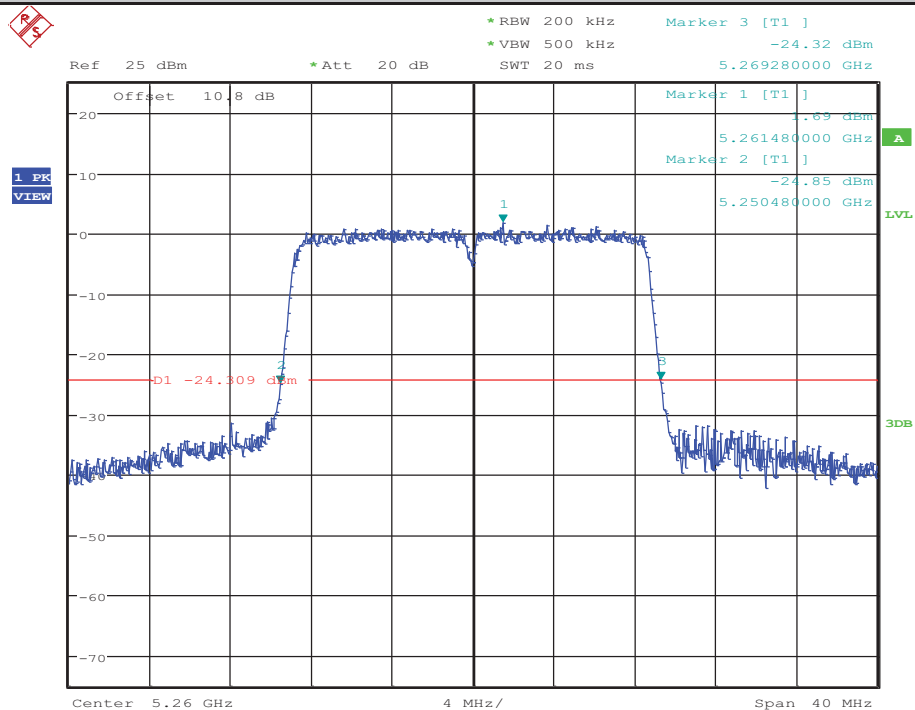
Date: 27.JUN.2017 11:24:08

Emission Bandwidth Measurement_11AC20MIMO_5260_Ant1



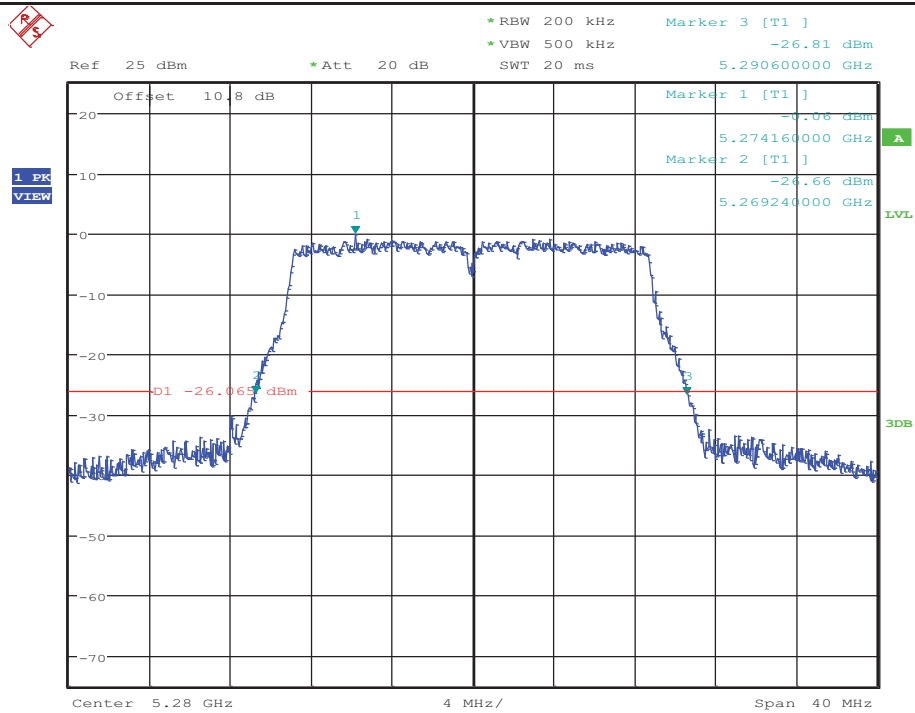
Date: 27.JUN.2017 11:27:55

Emission Bandwidth Measurement_11AC20MIMO_5260_Ant2



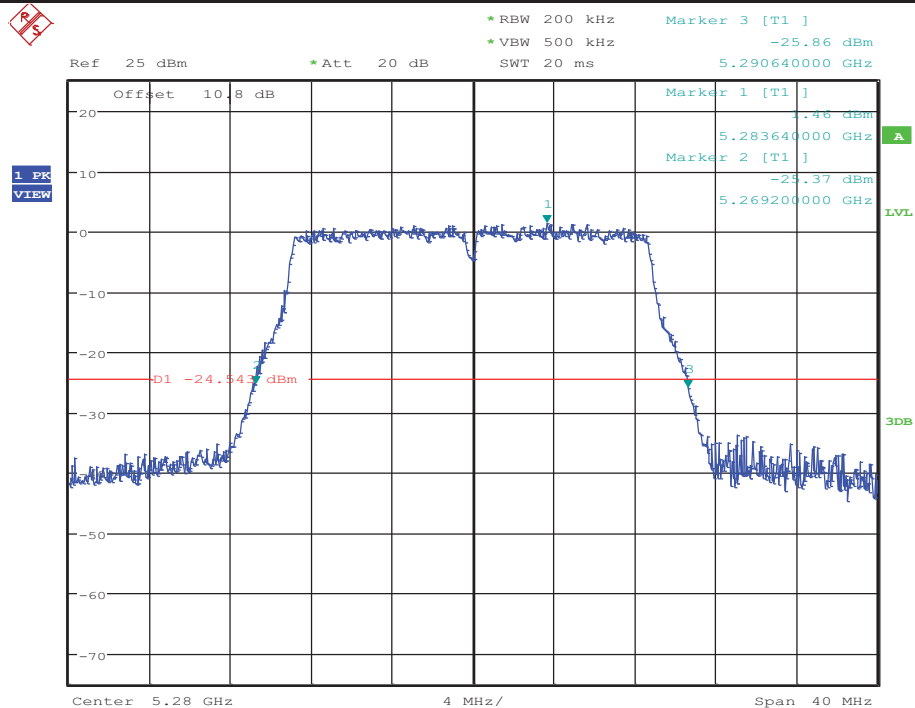
Date: 27.JUN.2017 11:30:46

Emission Bandwidth Measurement_11AC20MIMO_5280_Ant1



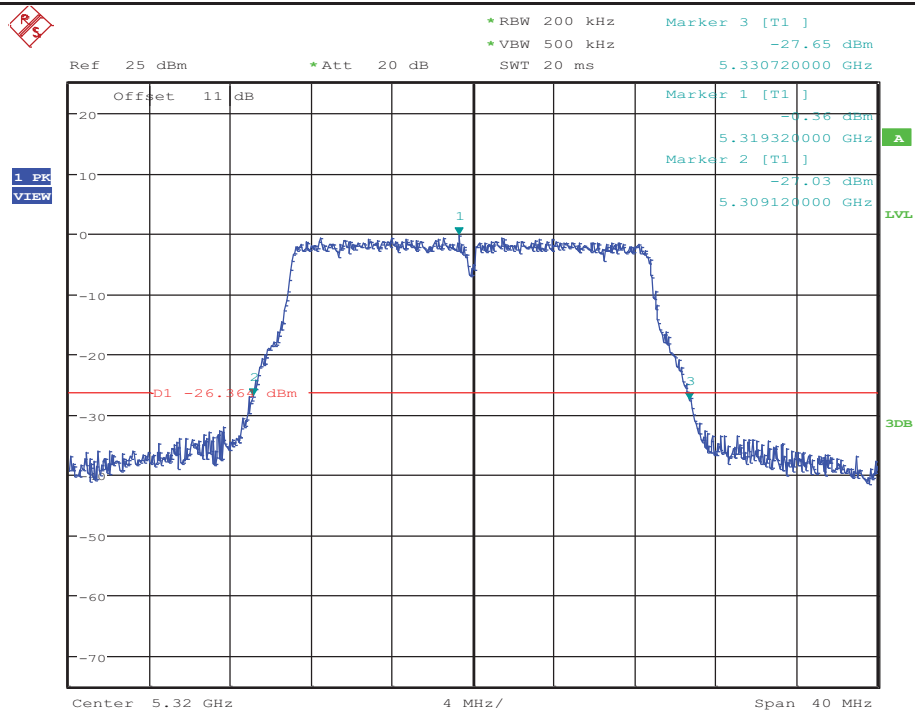
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Emission Bandwidth Measurement_11AC20MIMO_5280_Ant2



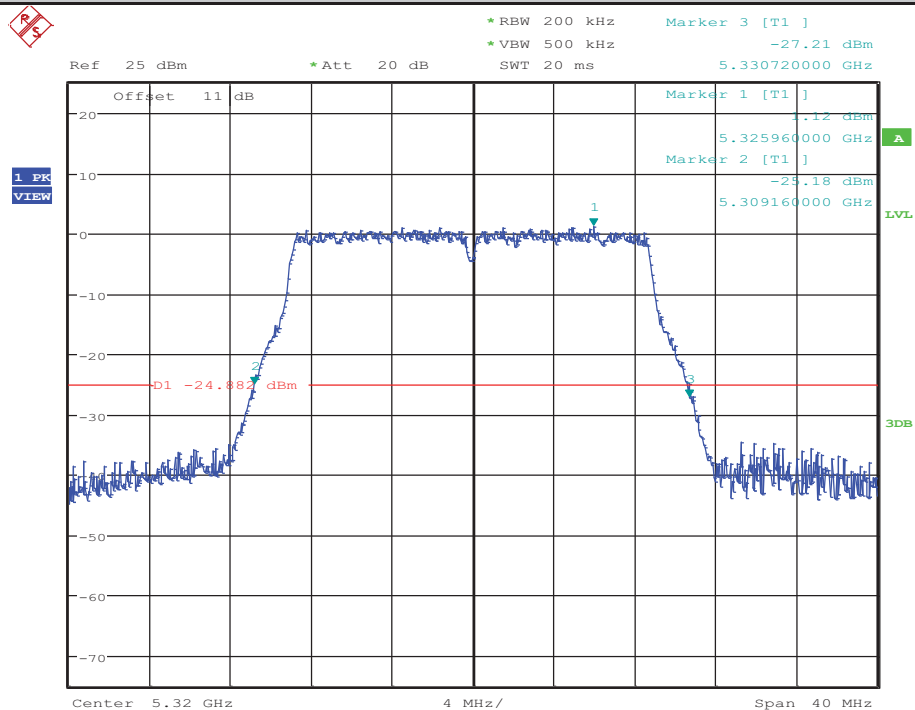
Date: 27.JUN.2017 11:37:47

Emission Bandwidth Measurement_11AC20MIMO_5320_Ant1



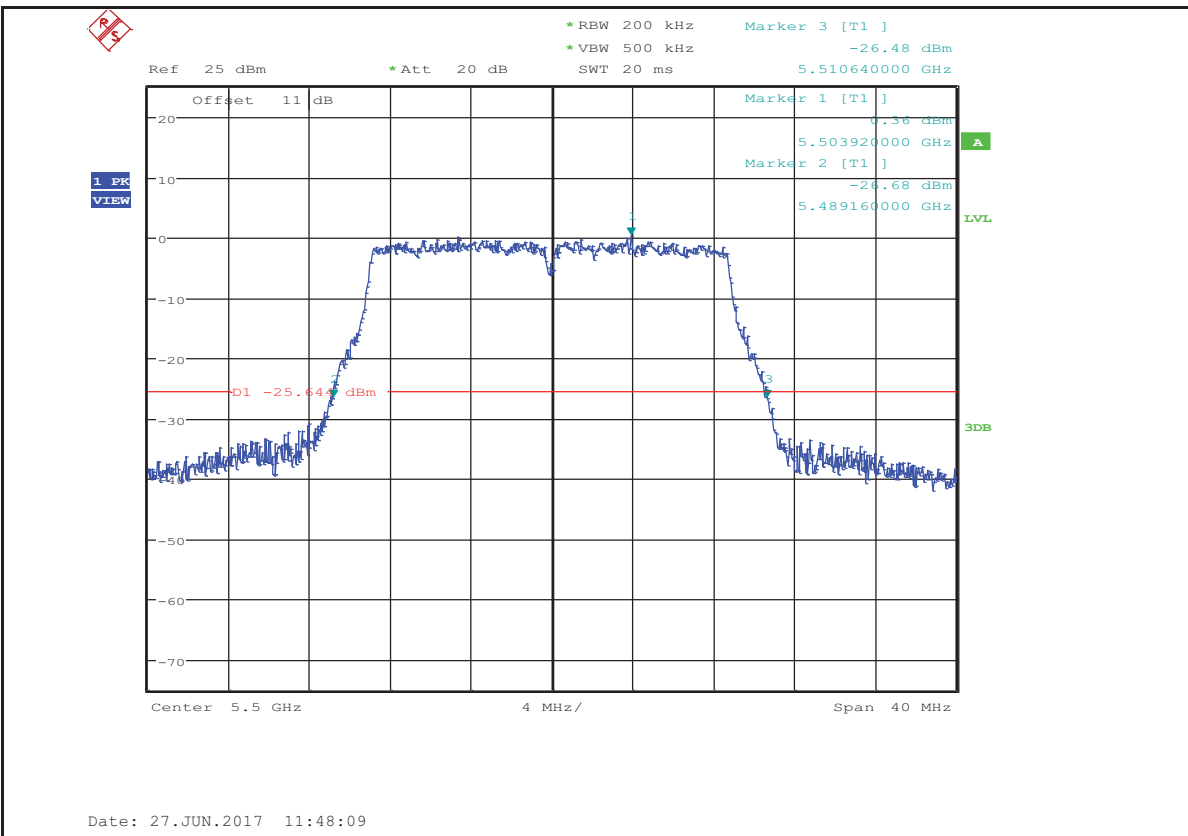
Date: 27.JUN.2017 11:41:23

Emission Bandwidth Measurement_11AC20MIMO_5320_Ant2

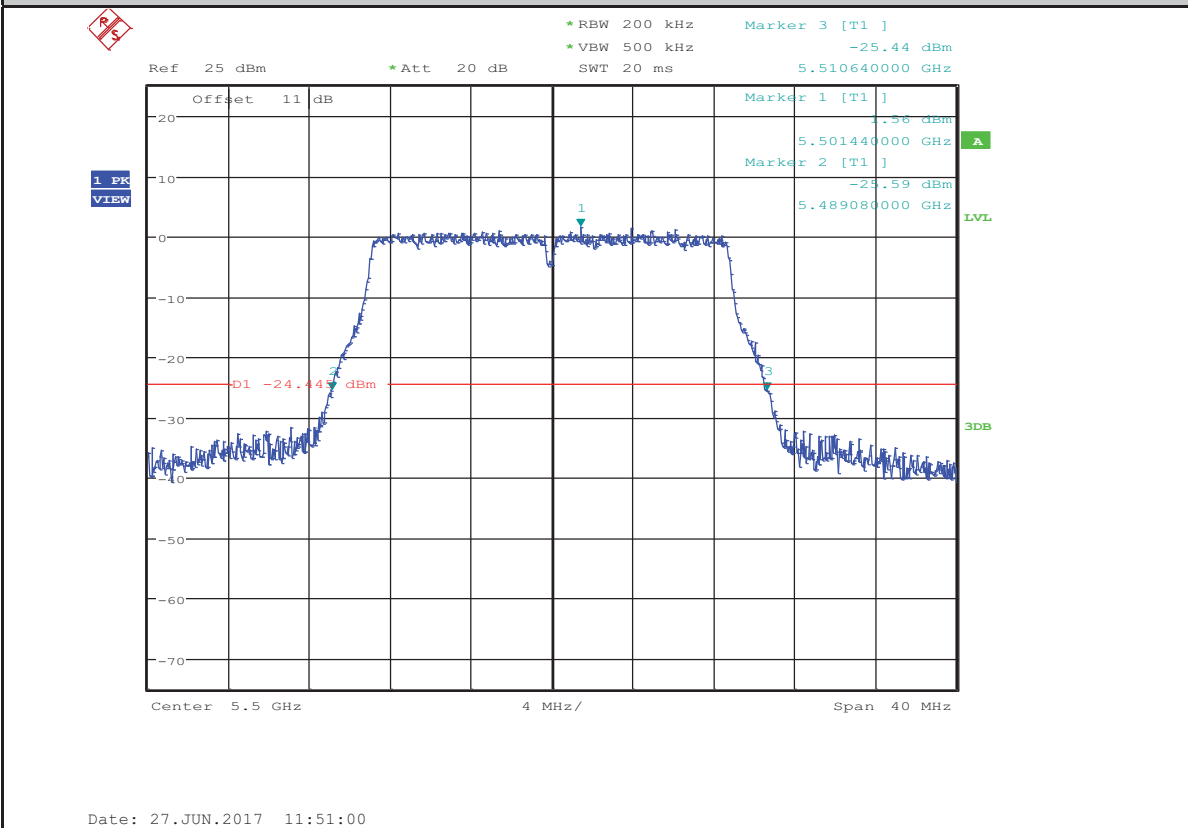


Date: 27.JUN.2017 11:44:14

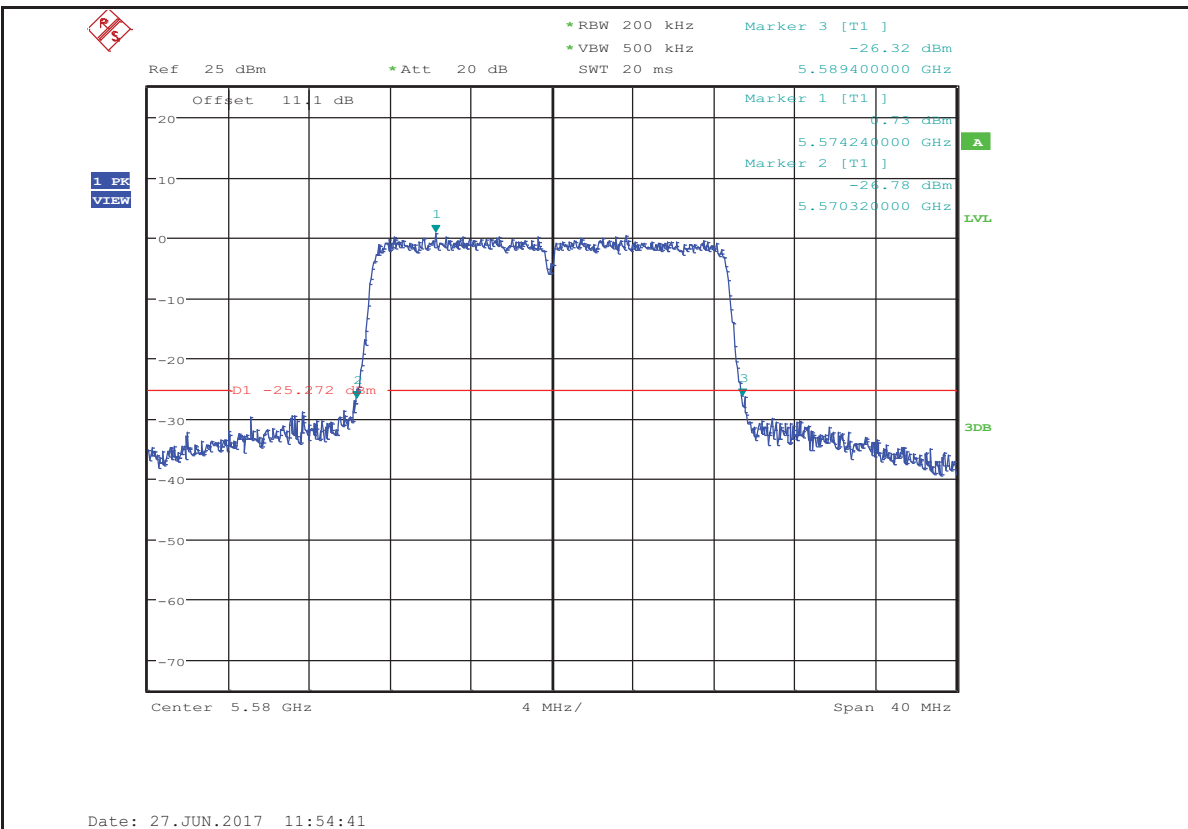
Emission Bandwidth Measurement_11AC20MIMO_5500_Ant1



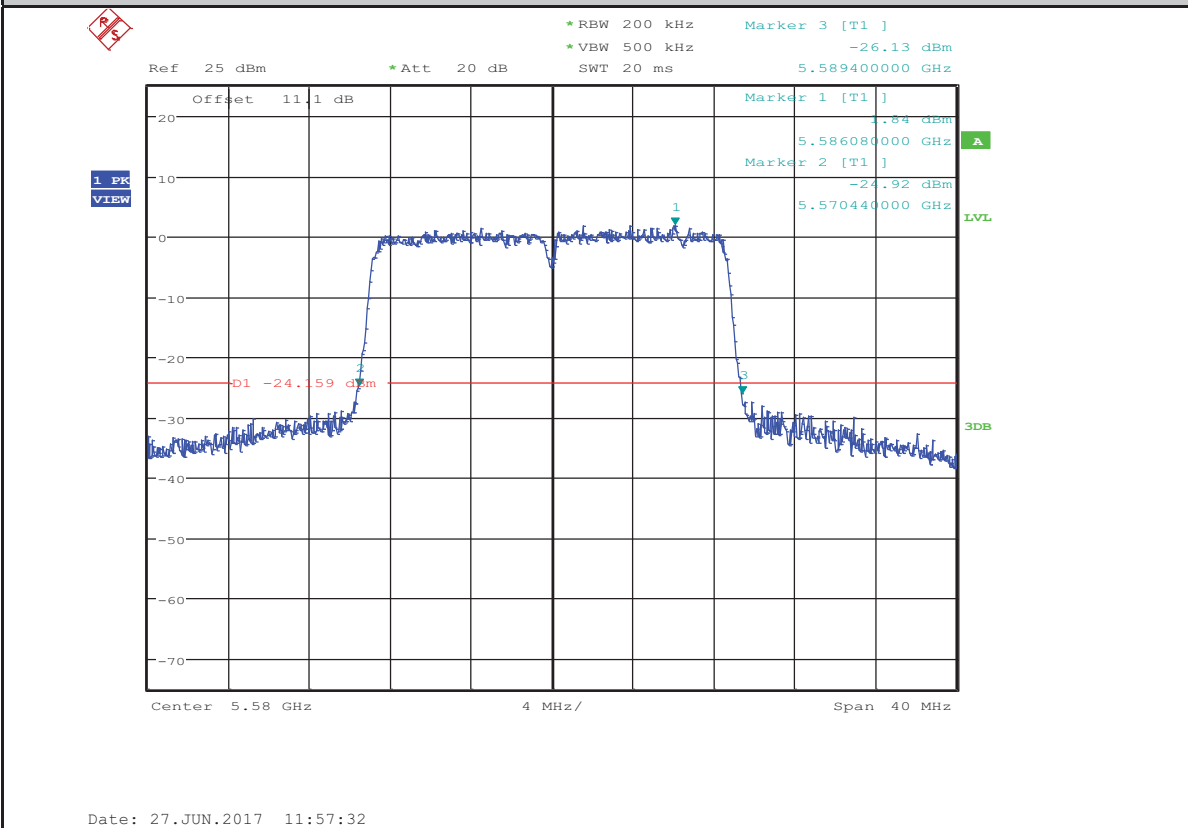
Emission Bandwidth Measurement_11AC20MIMO_5500_Ant2



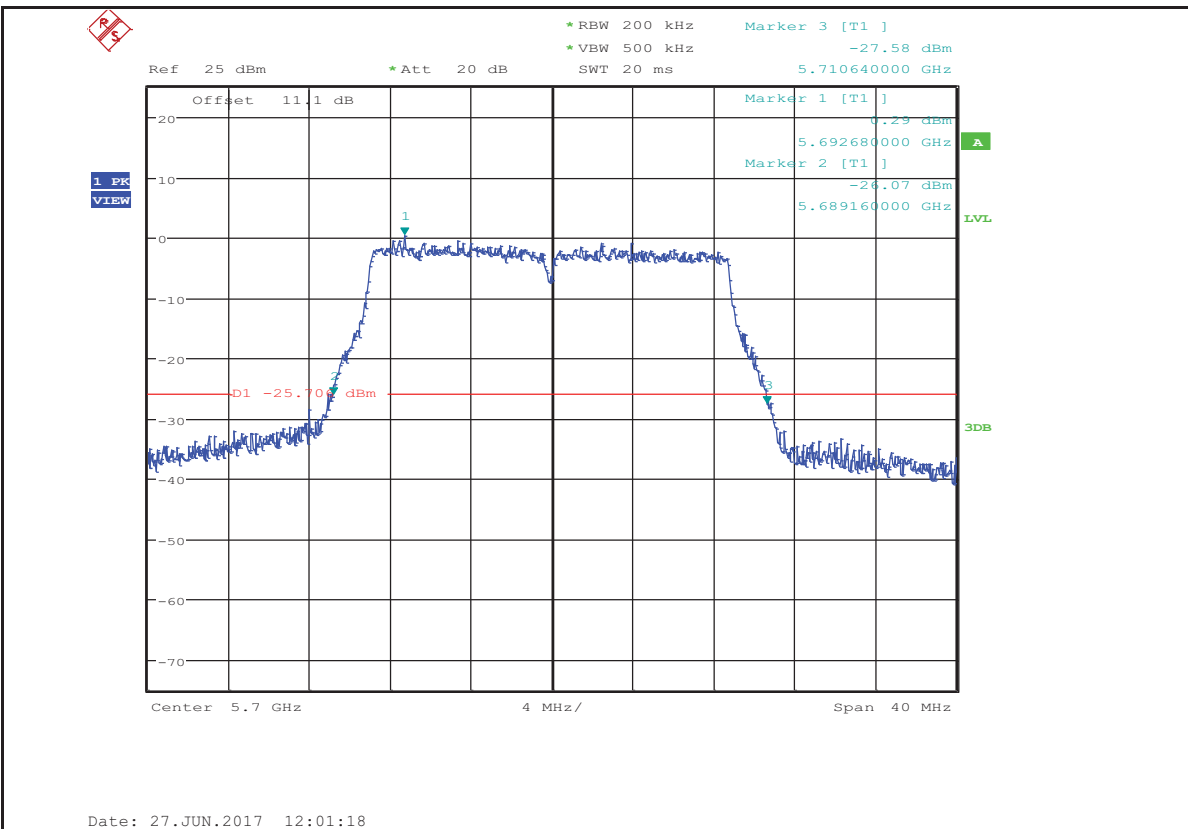
Emission Bandwidth Measurement_11AC20MIMO_5580_Ant1



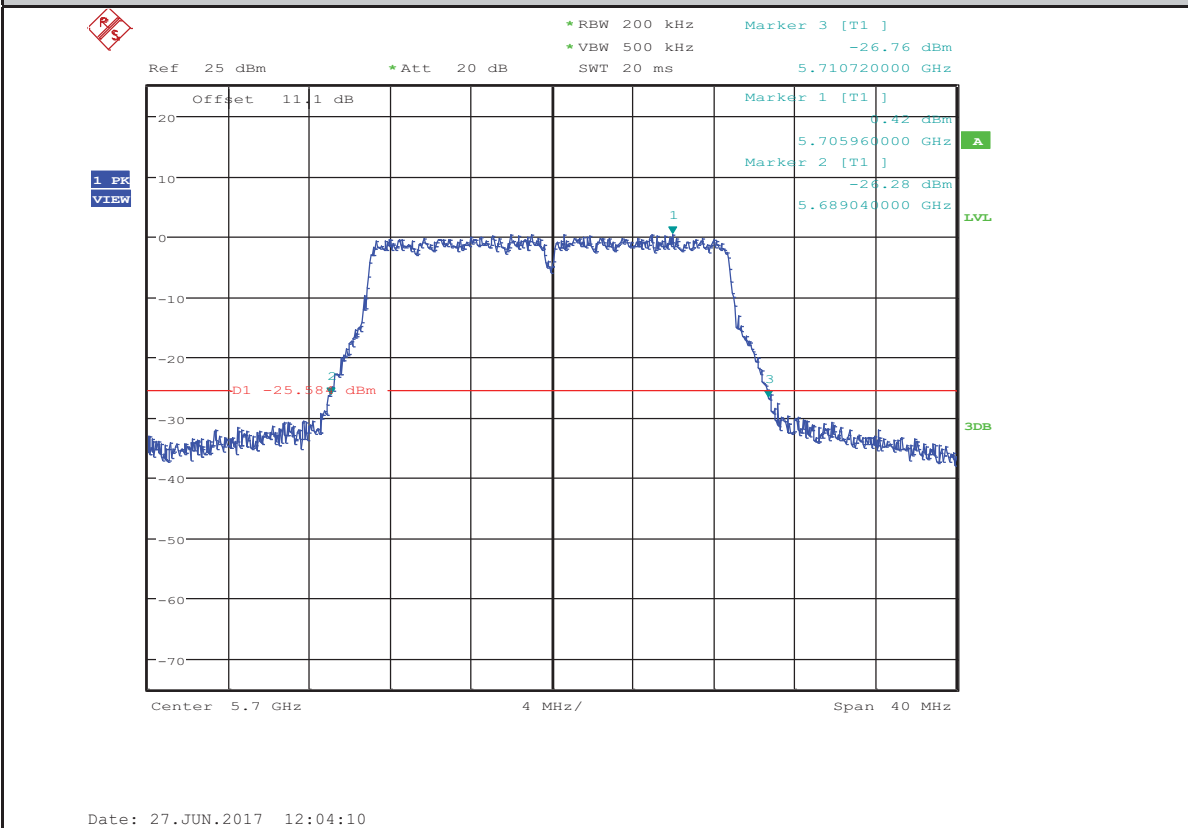
Emission Bandwidth Measurement_11AC20MIMO_5580_Ant2



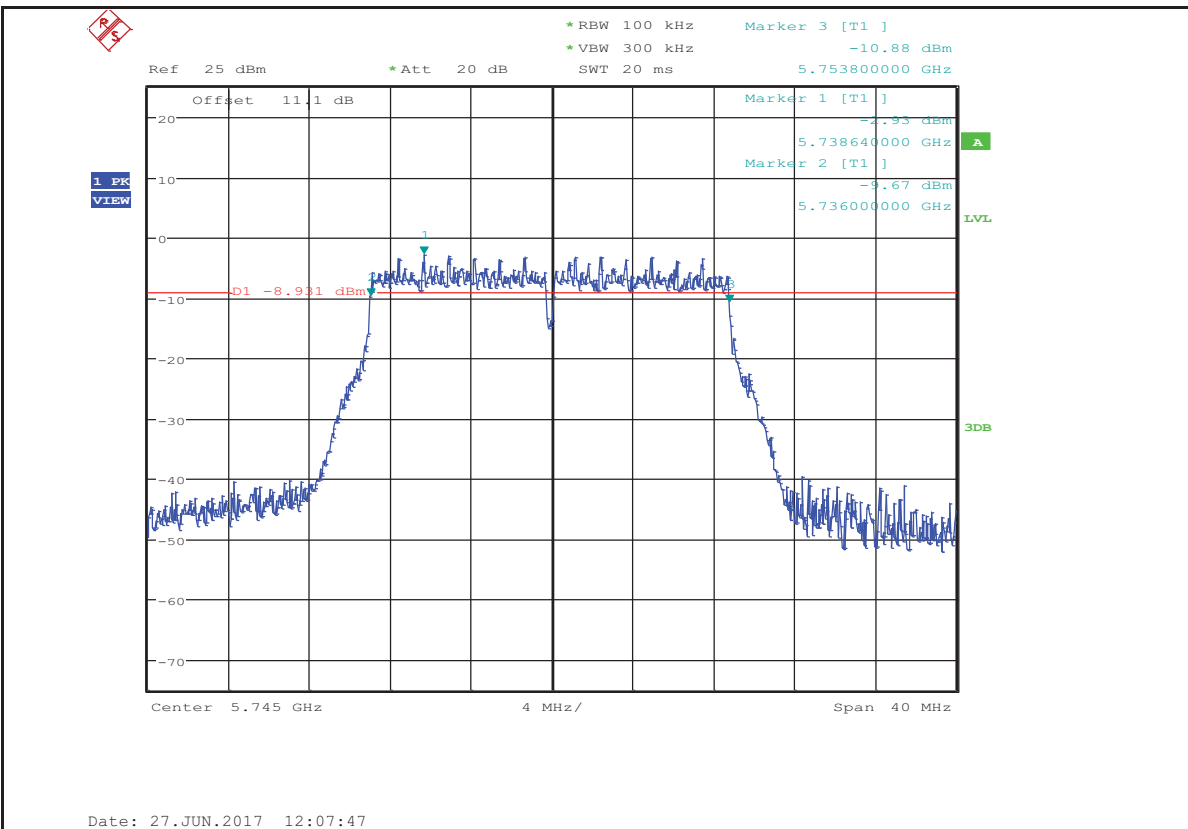
Emission Bandwidth Measurement_11AC20MIMO_5700_Ant1



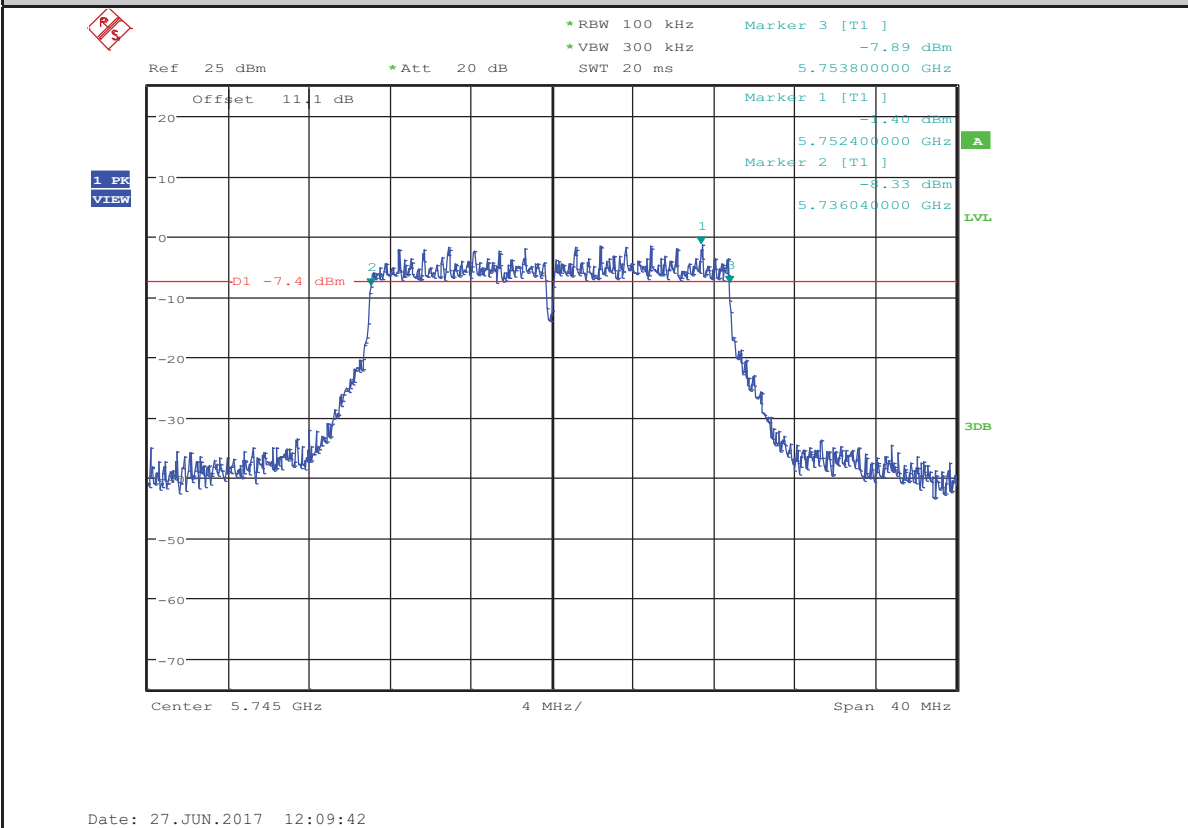
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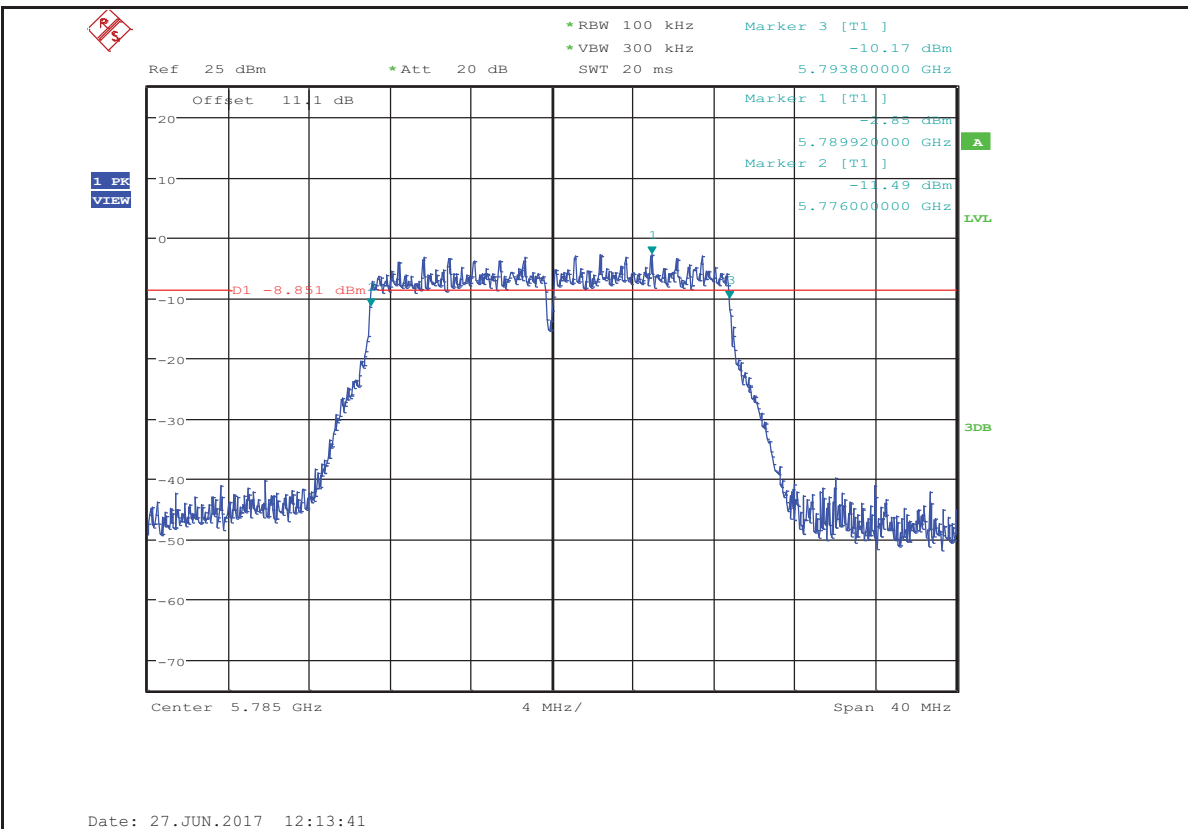
Emission Bandwidth Measurement_11AC20MIMO_5745_Ant1



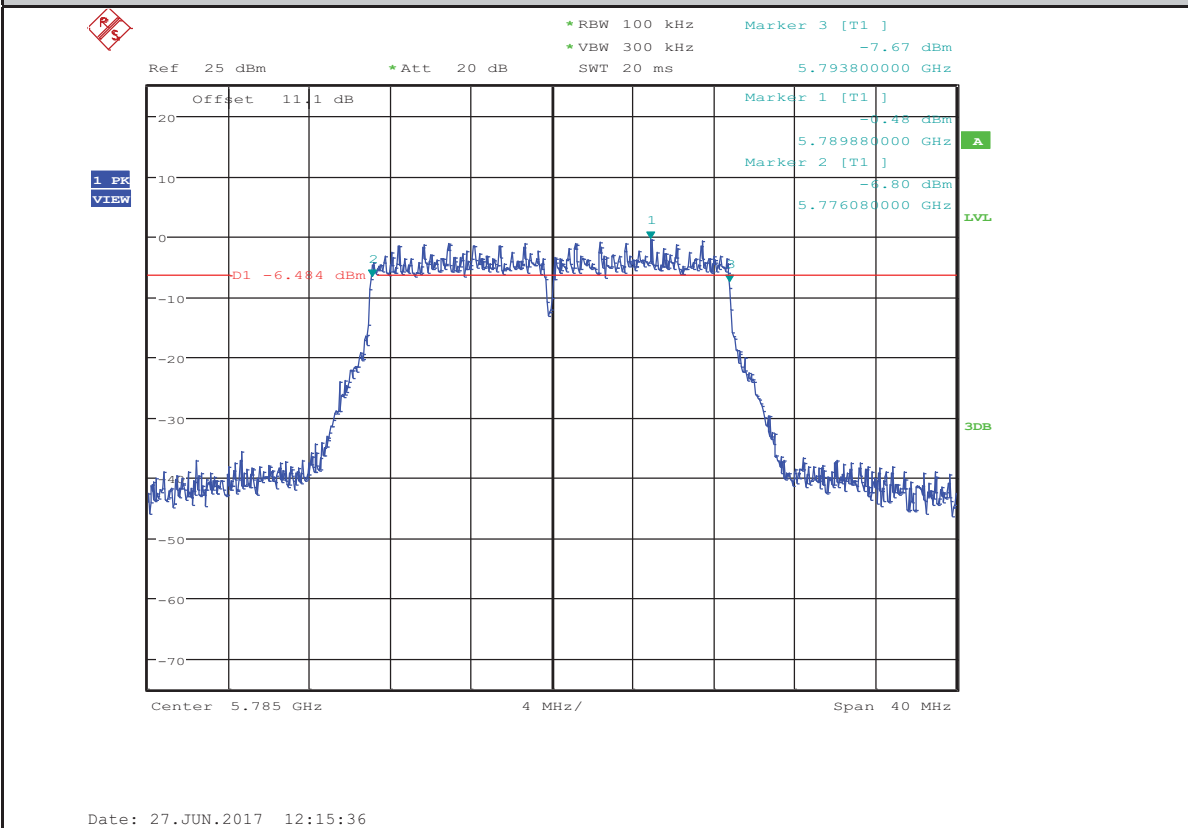
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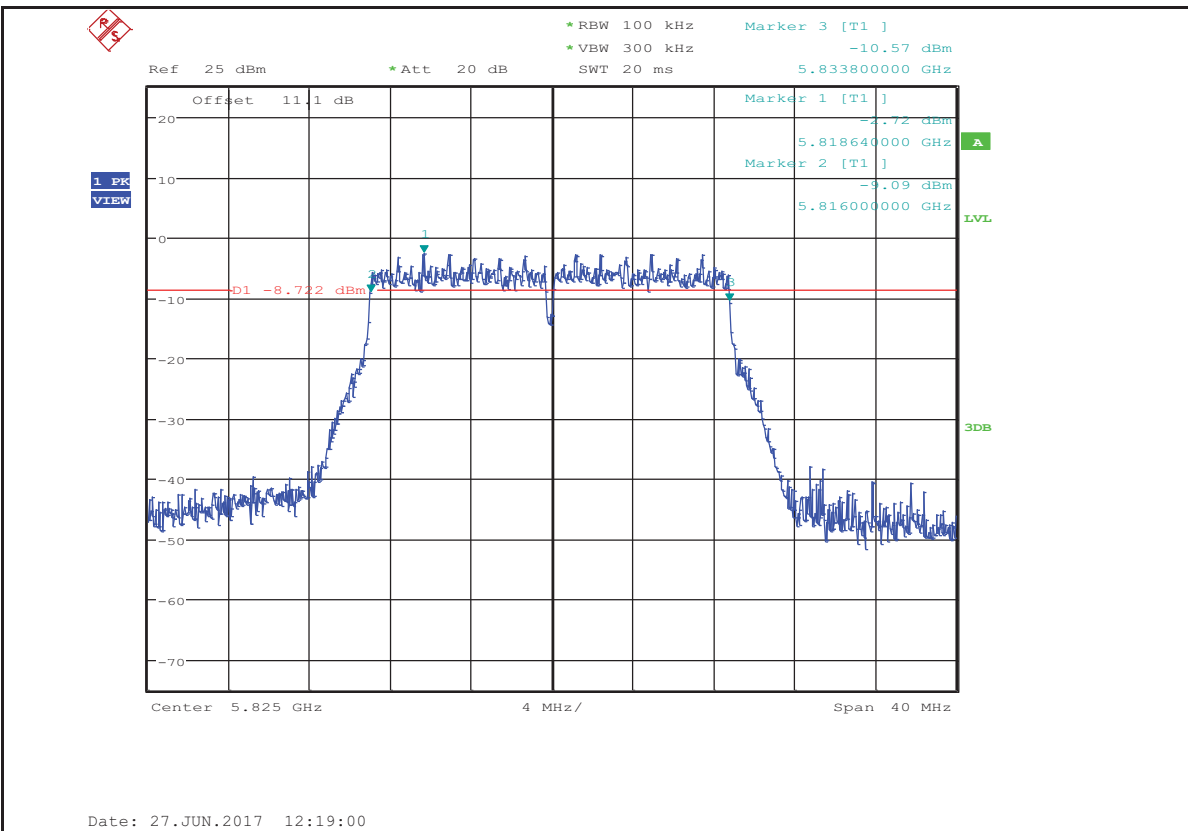
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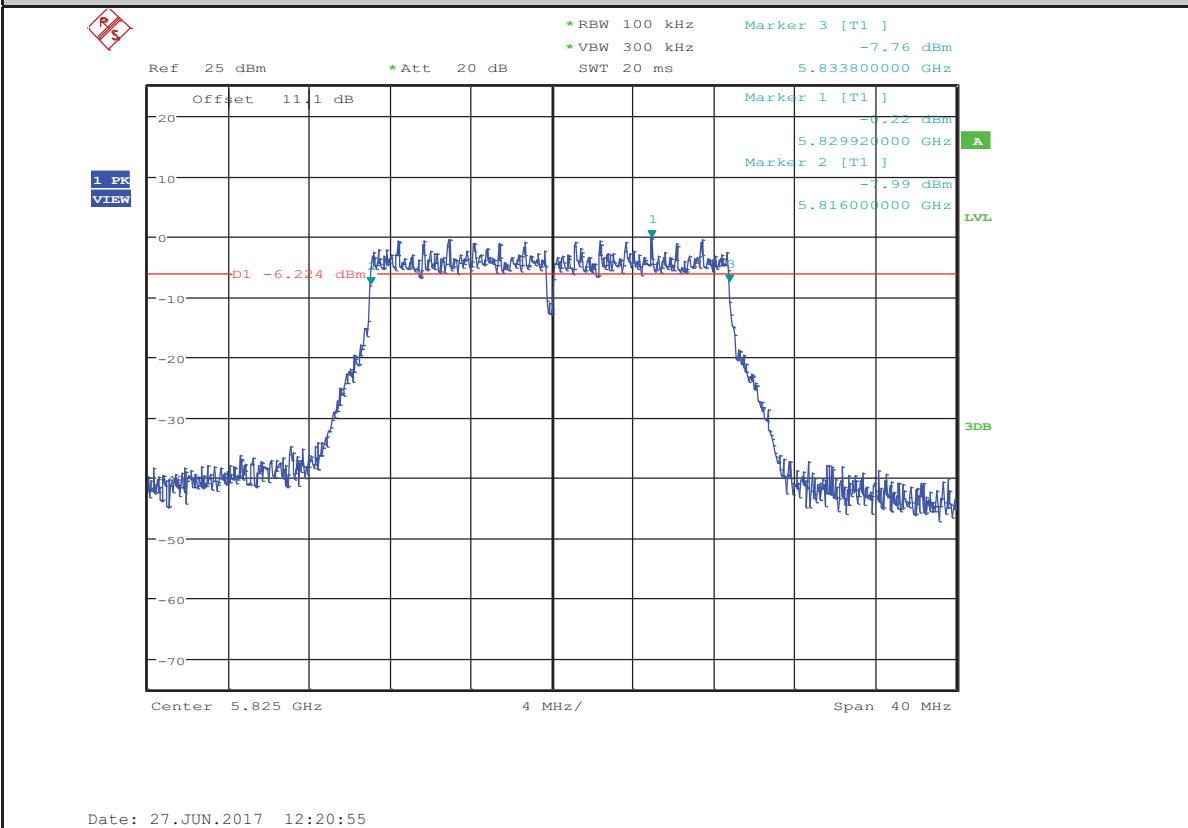
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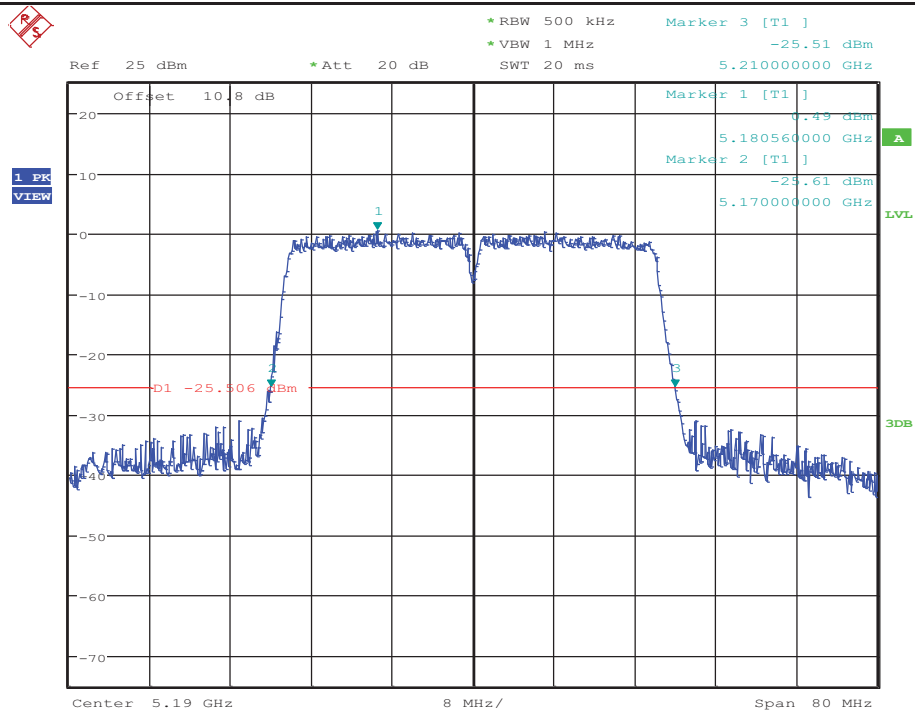
Emission Bandwidth Measurement_11AC20MIMO_5825_Ant1



Emission Bandwidth Measurement_11AC20MIMO_5825_Ant2

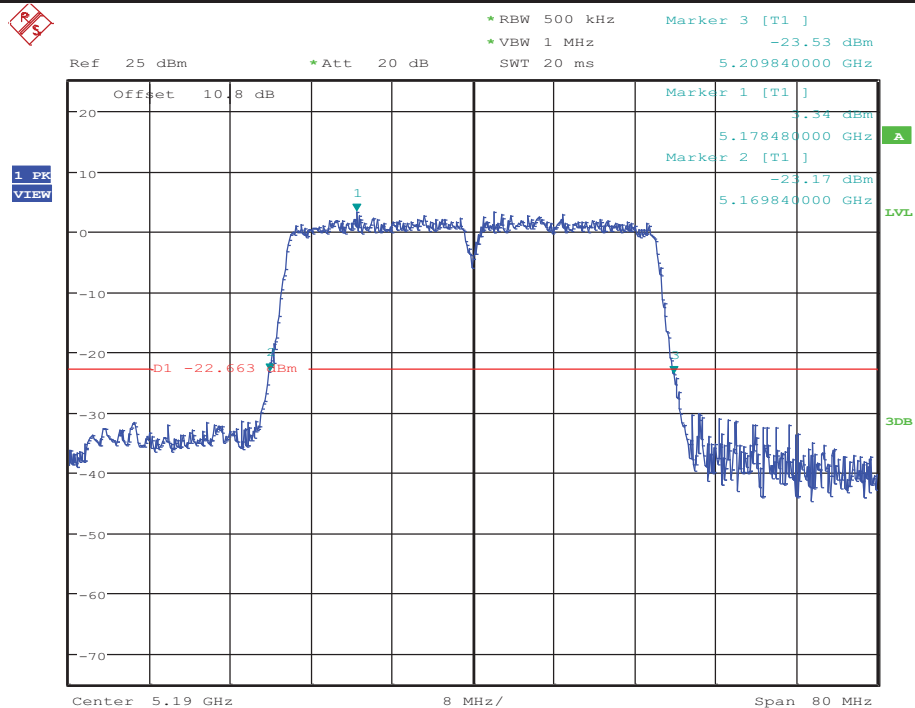


Emission Bandwidth Measurement_11AC40MIMO_5190_Ant1



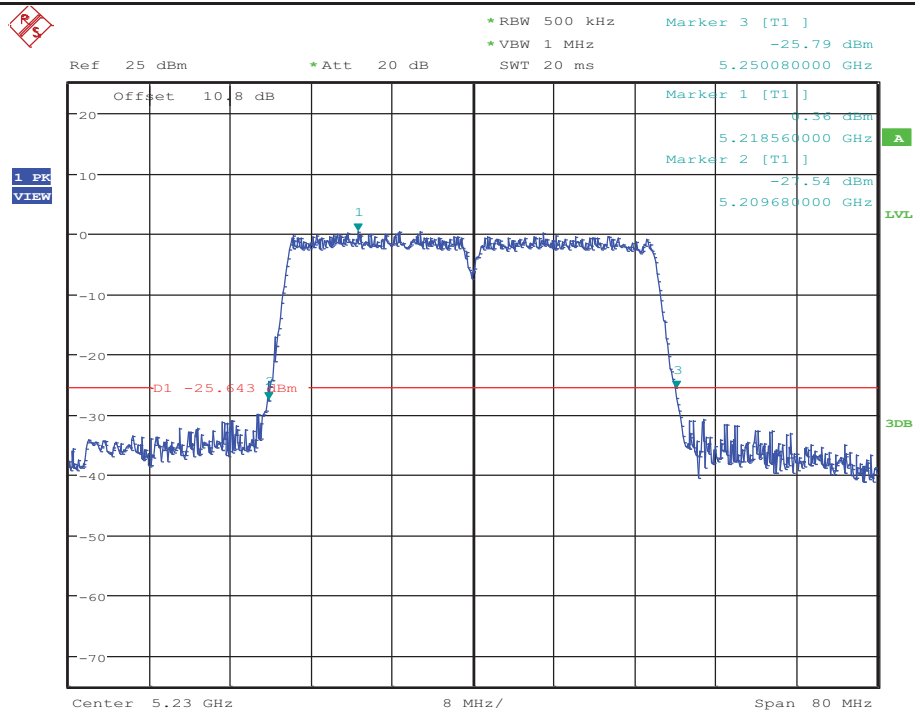
Date: 27.JUN.2017 12:40:38

Emission Bandwidth Measurement_11AC40MIMO_5190_Ant2



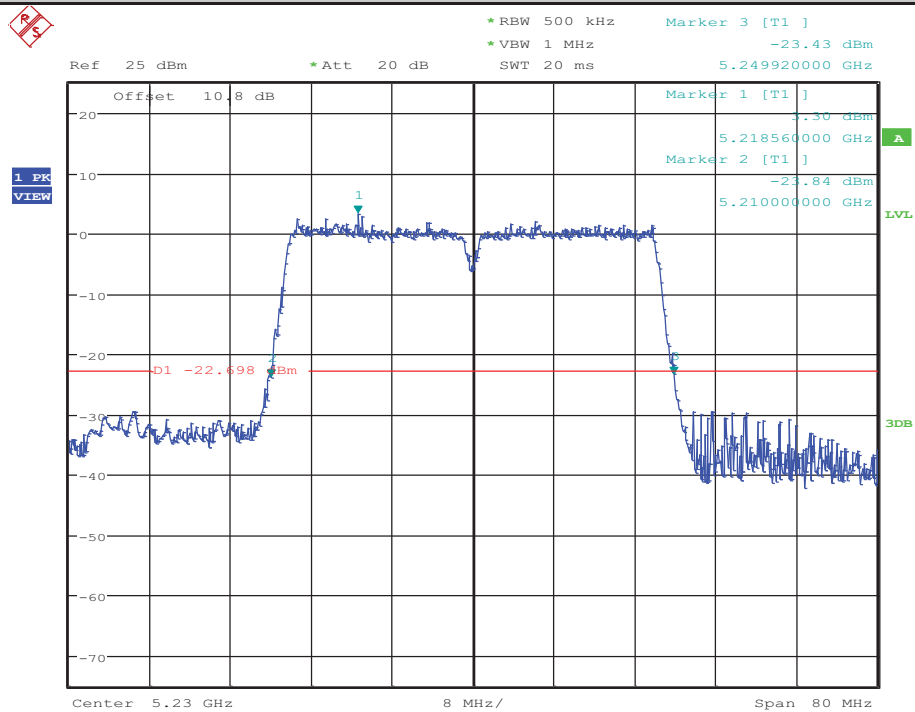
Date: 27.JUN.2017 12:42:57

Emission Bandwidth Measurement_11AC40MIMO_5230_Ant1



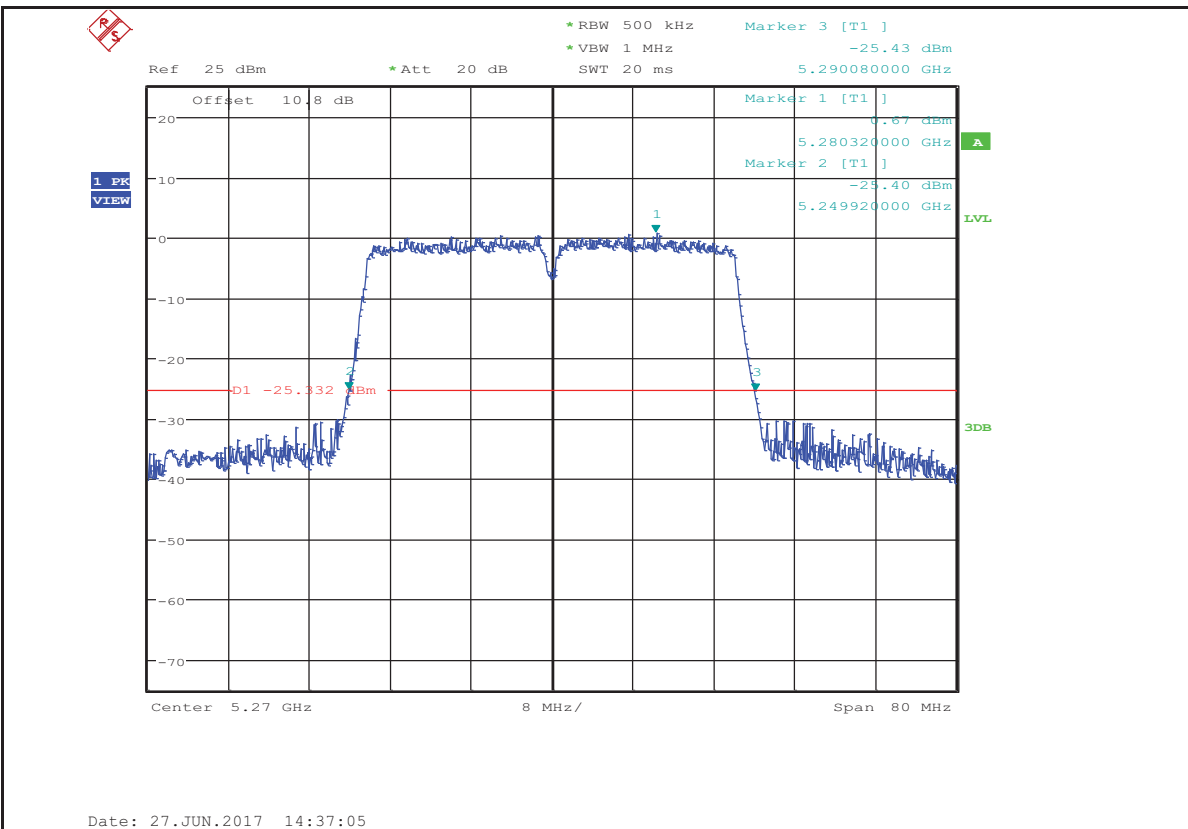
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Emission Bandwidth Measurement_11AC40MIMO_5230_Ant2

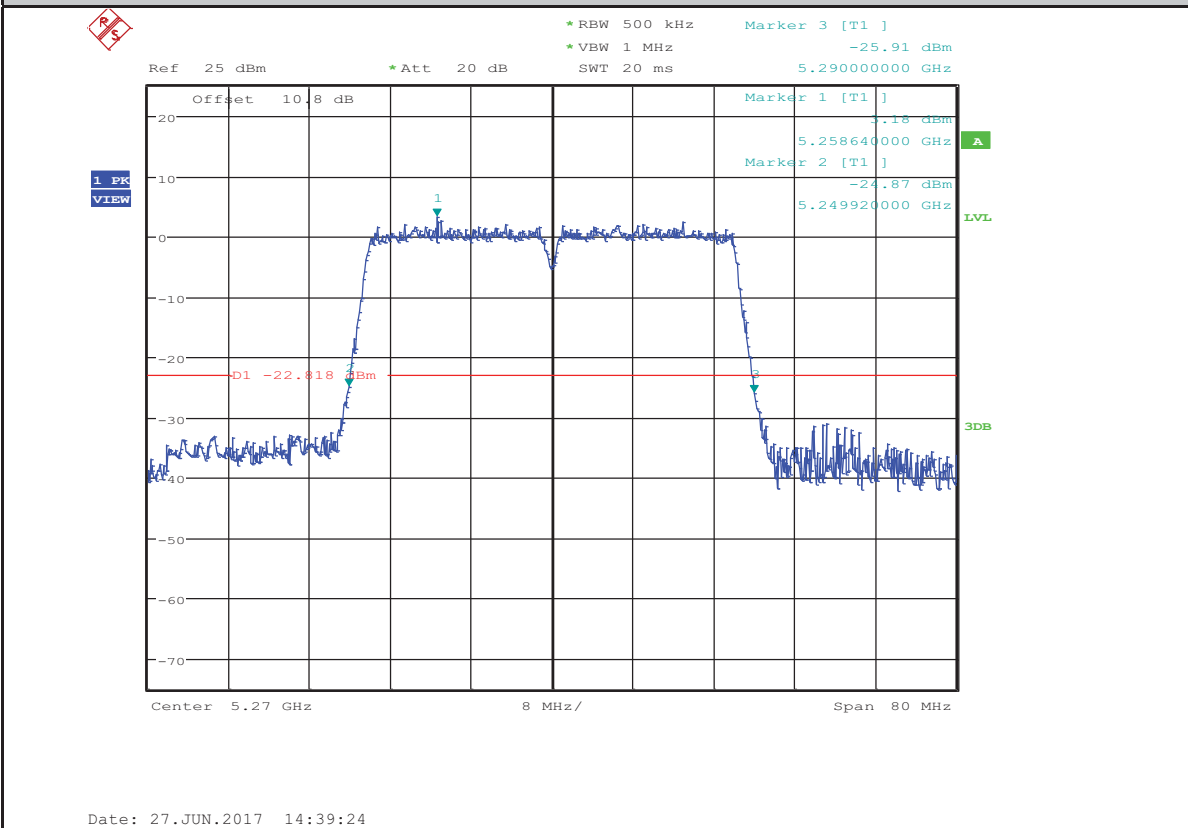


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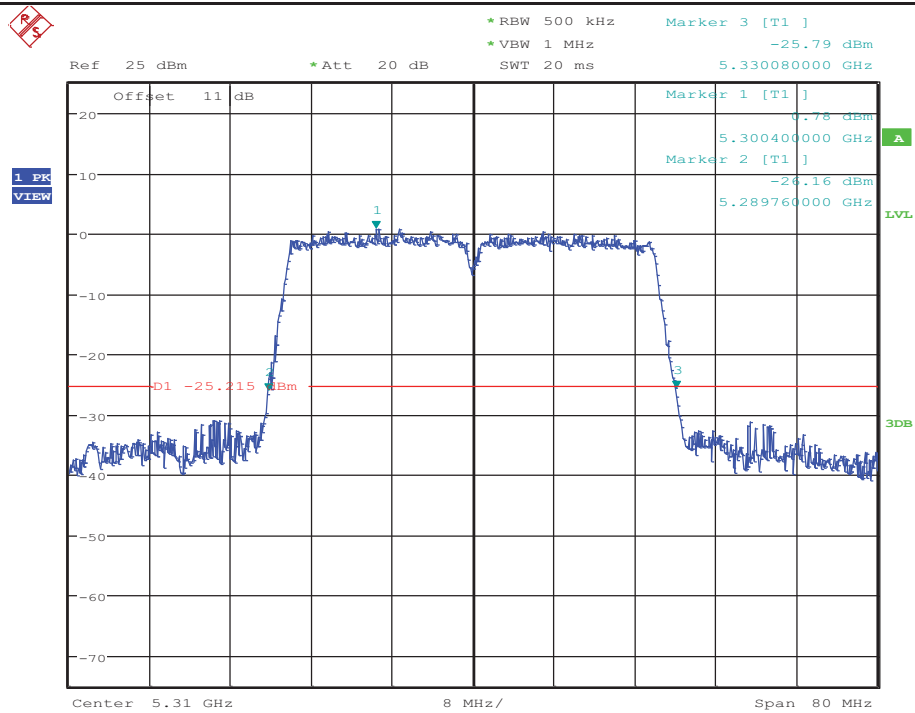
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Emission Bandwidth Measurement_11AC40MIMO_5270_Ant2

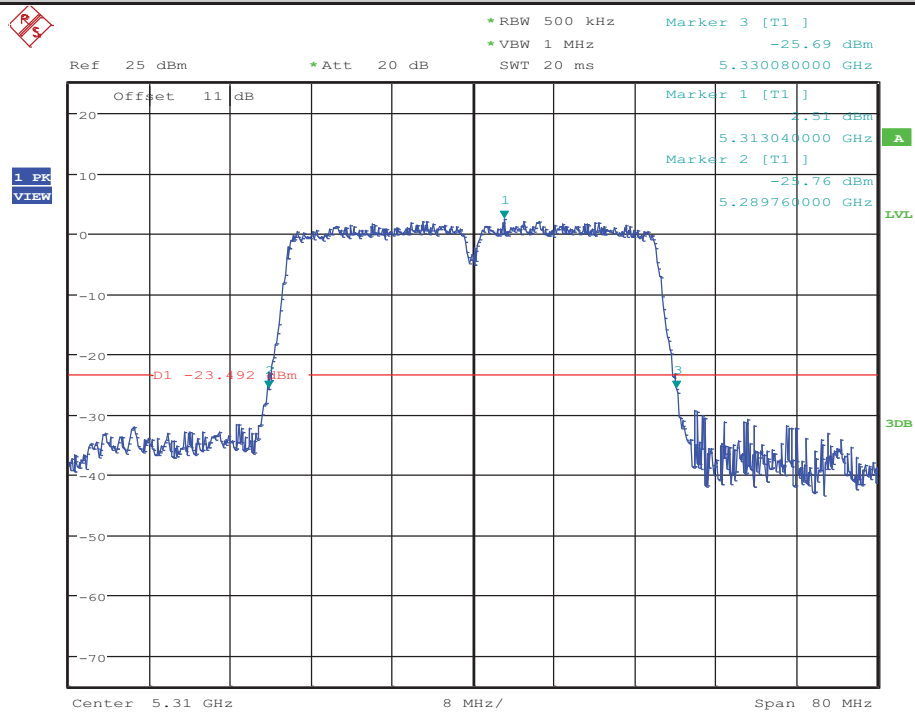


Emission Bandwidth Measurement_11AC40MIMO_5310_Ant1



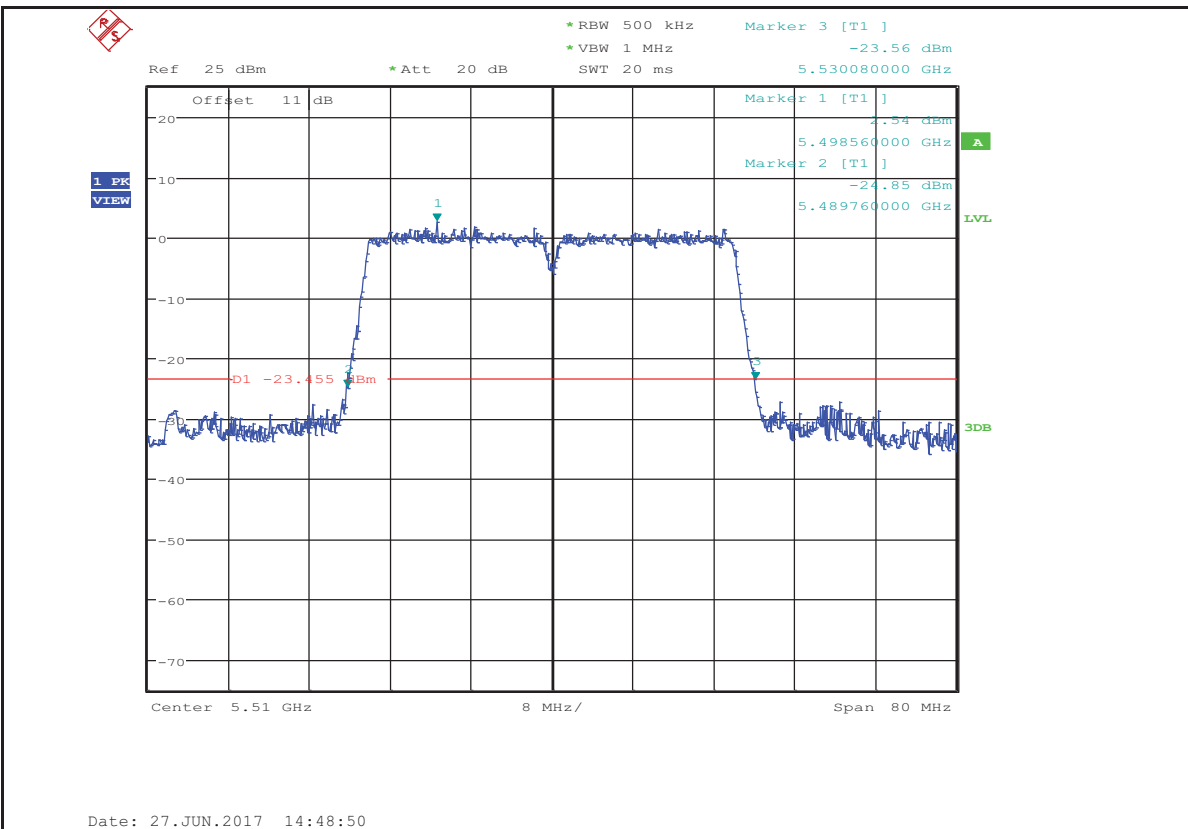
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Emission Bandwidth Measurement_11AC40MIMO_5310_Ant2

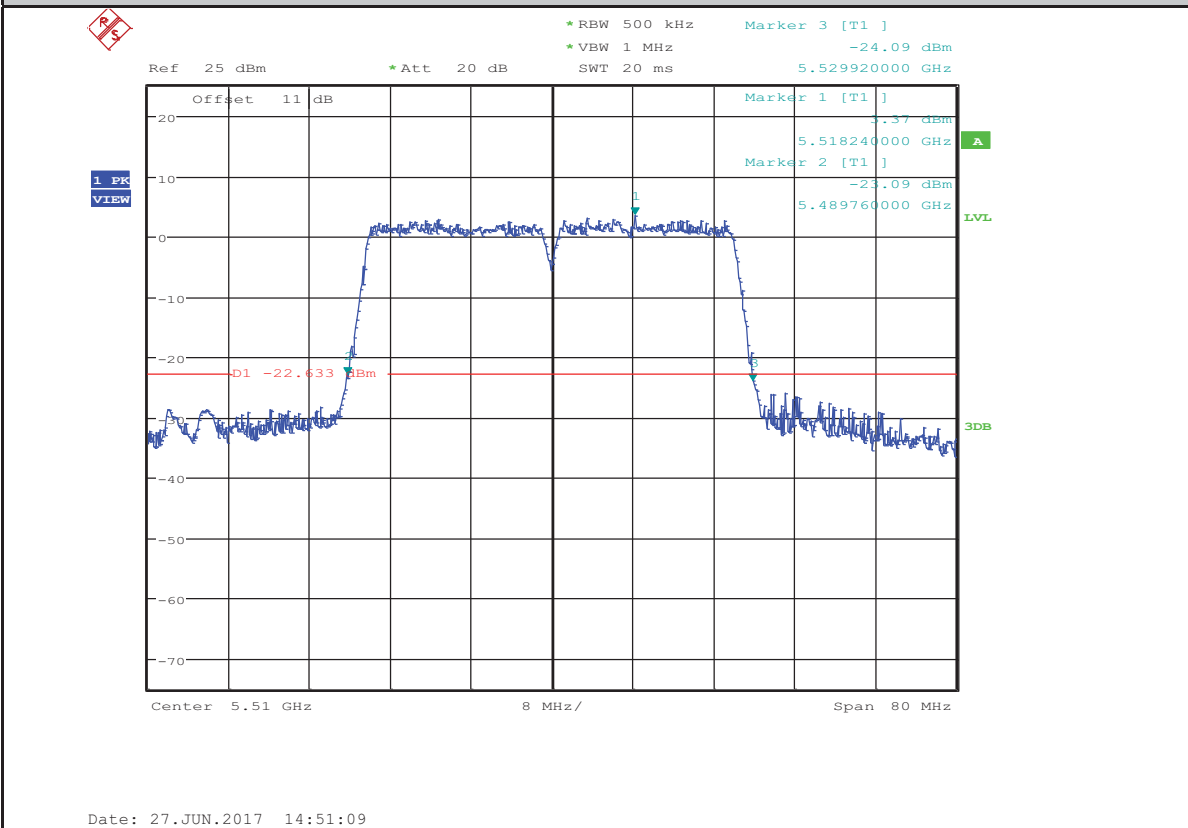


Date: 27.JUN.2017 14:45:01

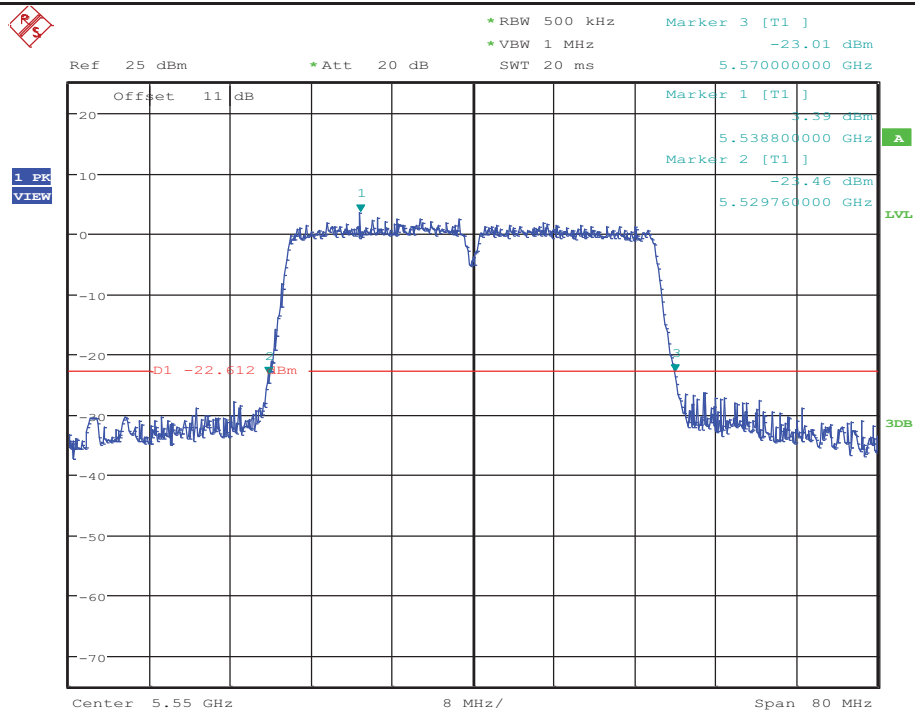
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Emission Bandwidth Measurement_11AC40MIMO_5510_Ant2

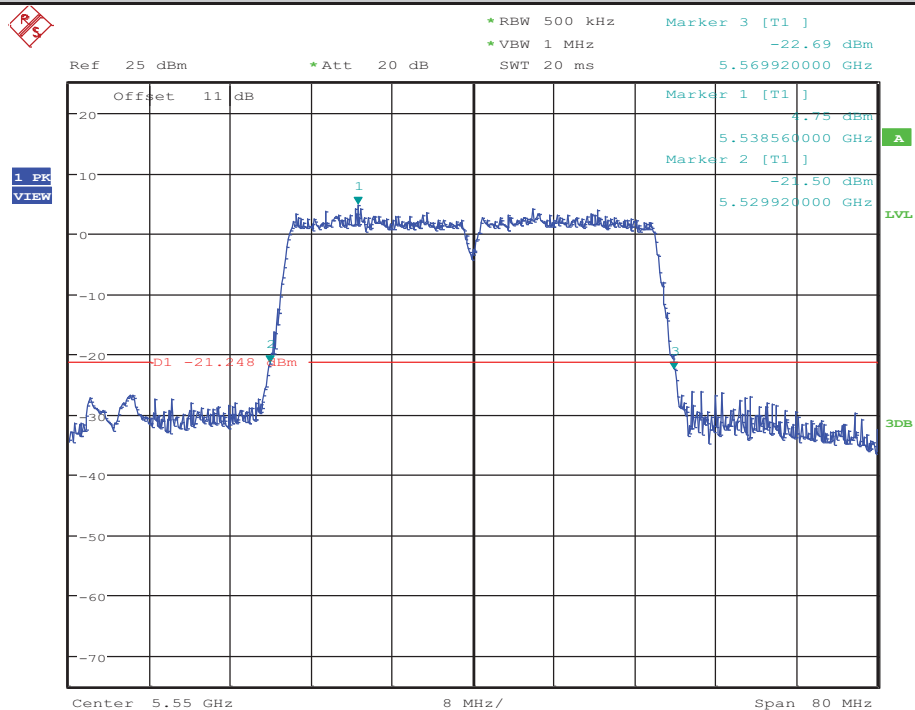


Emission Bandwidth Measurement_11AC40MIMO_5550_Ant1



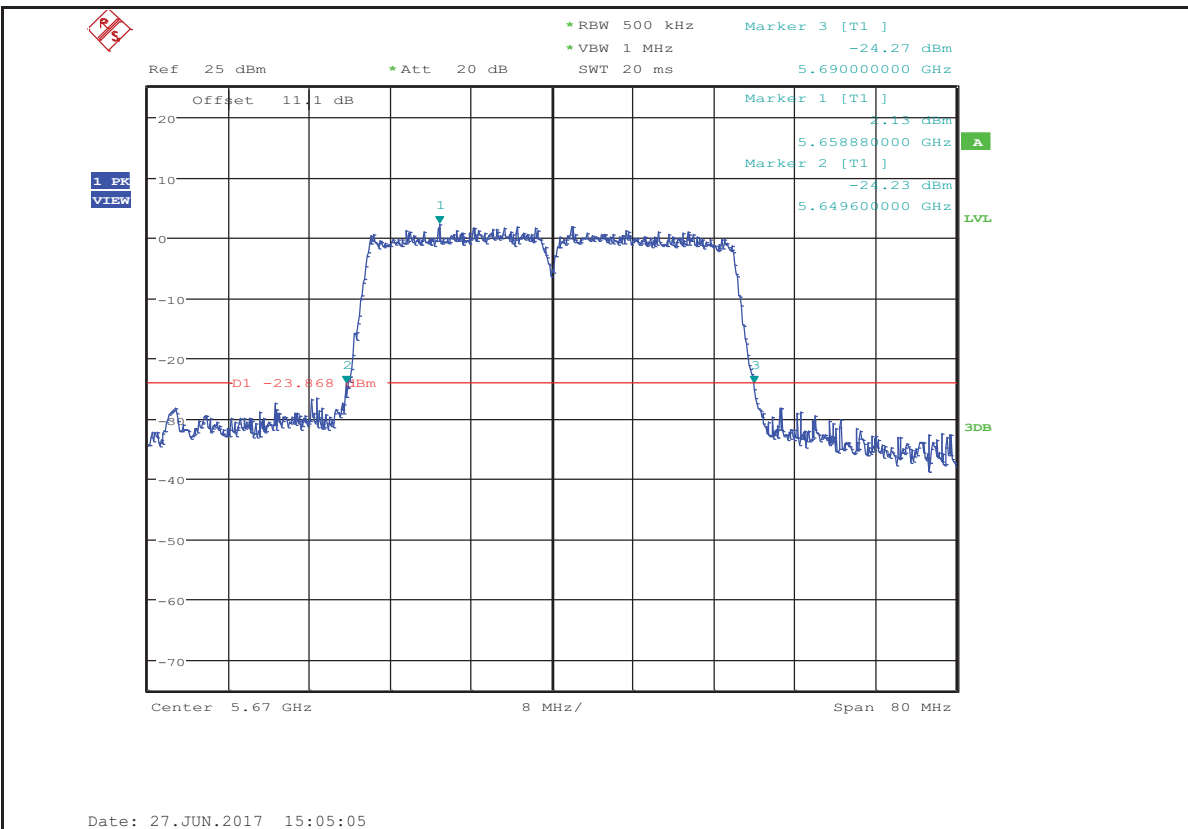
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Emission Bandwidth Measurement_11AC40MIMO_5550_Ant2

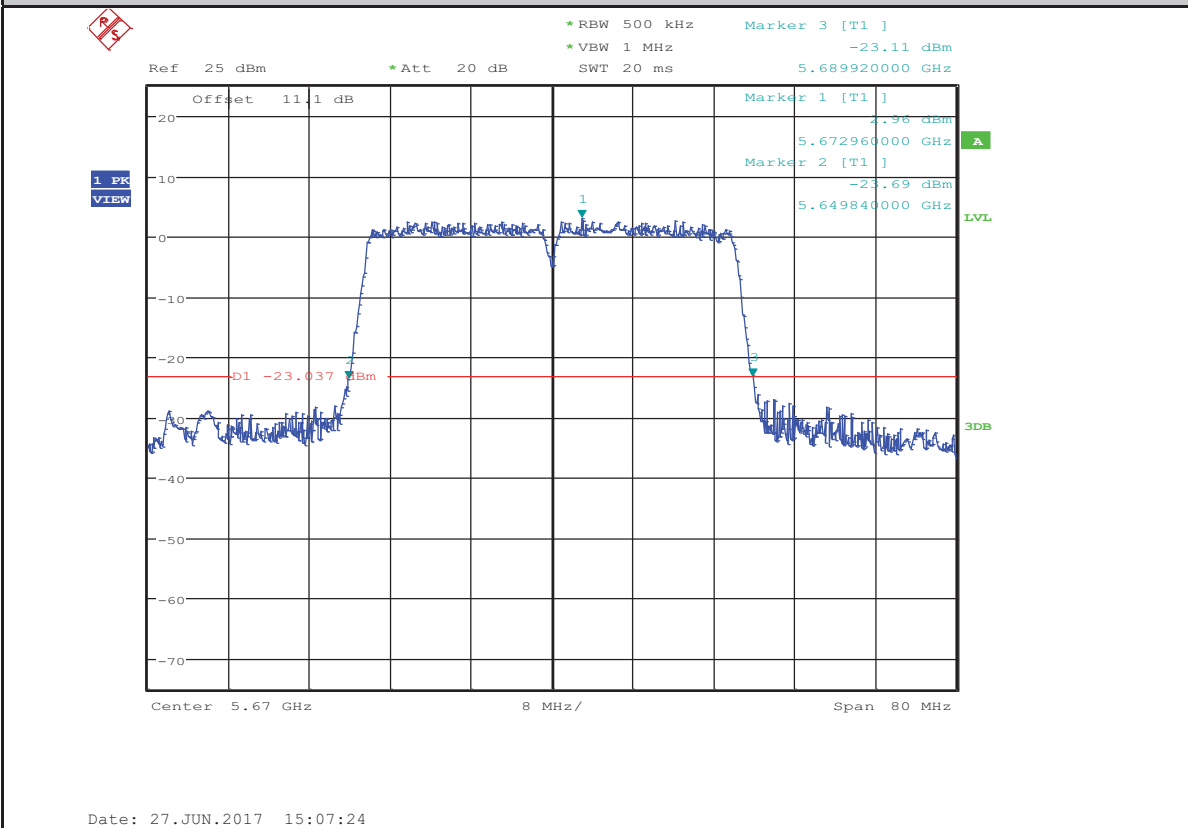


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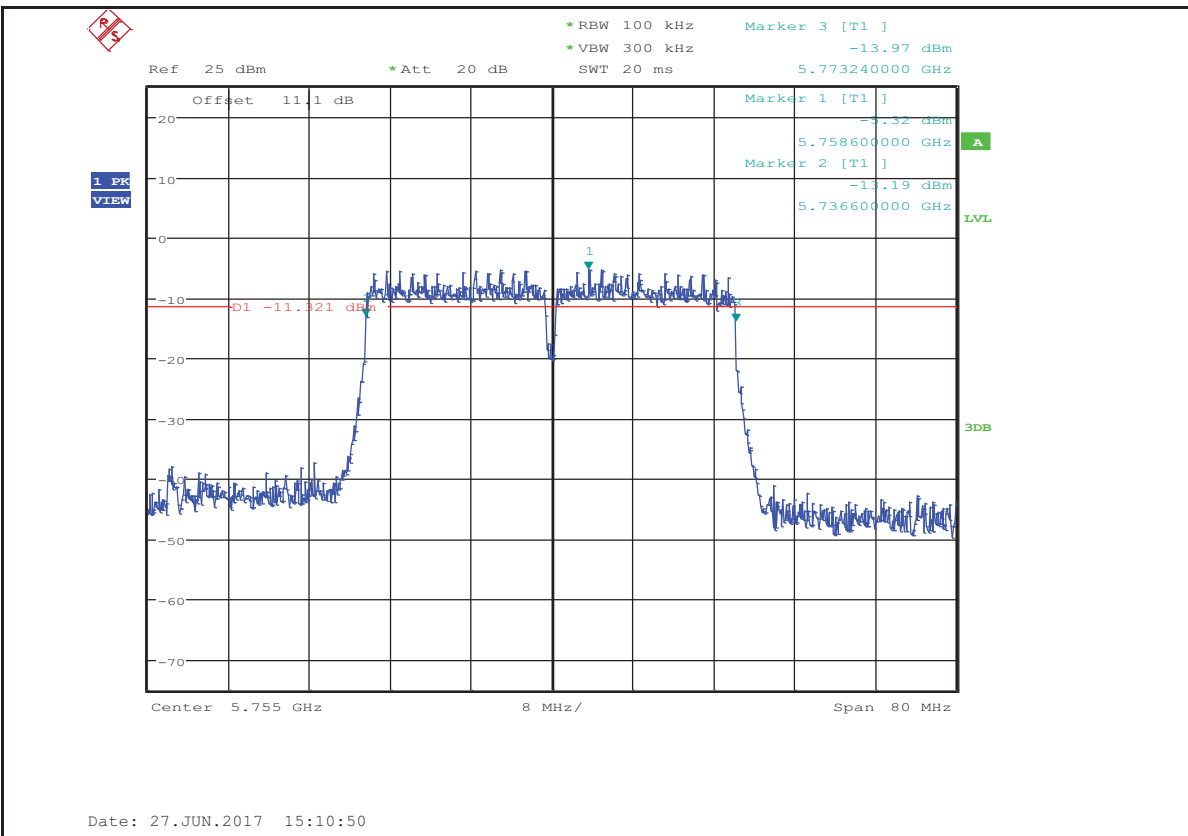
Emission Bandwidth Measurement_11AC40MIMO_5670_Ant1



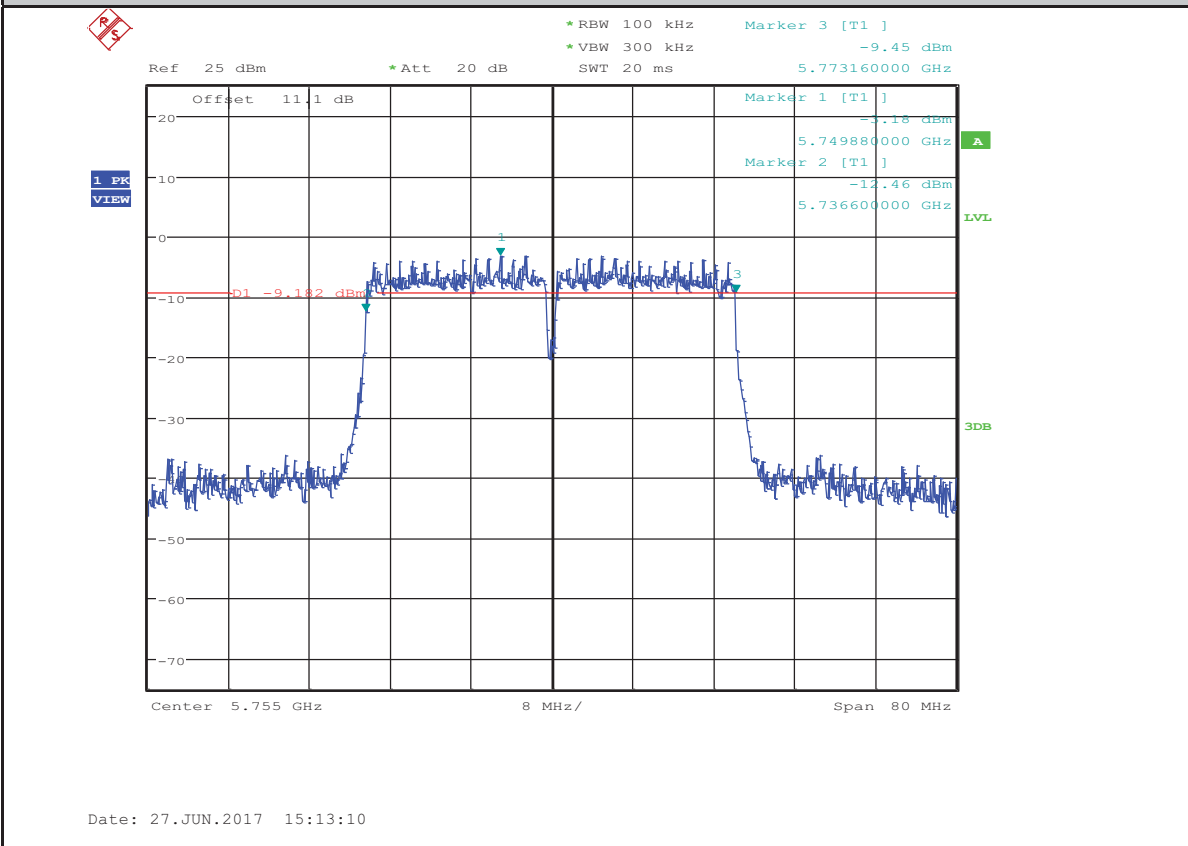
Emission Bandwidth Measurement_11AC40MIMO_5670_Ant2



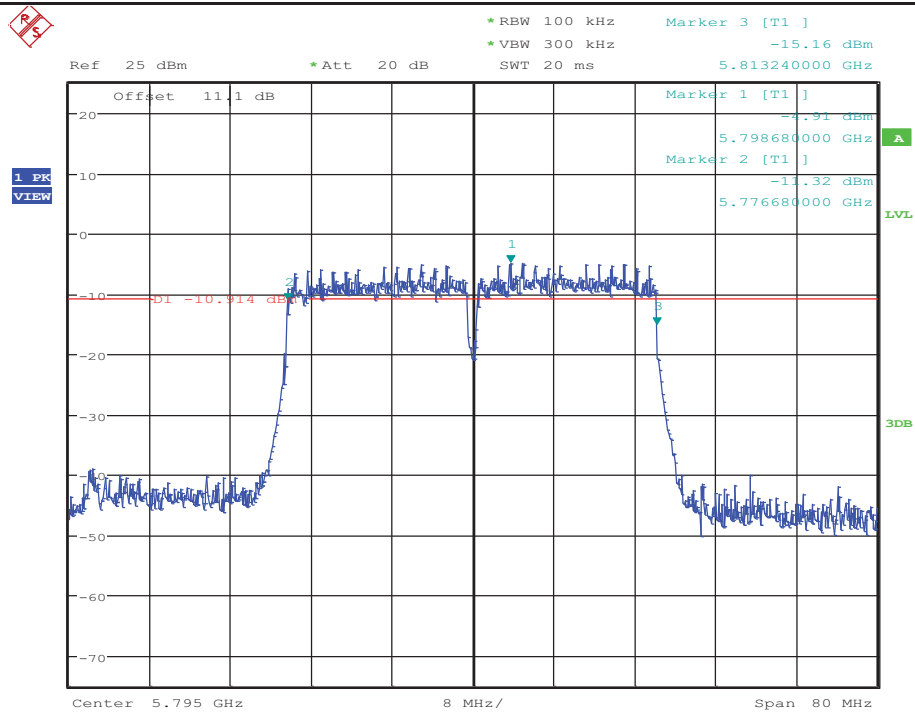
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Emission Bandwidth Measurement_11AC40MIMO_5755_Ant2

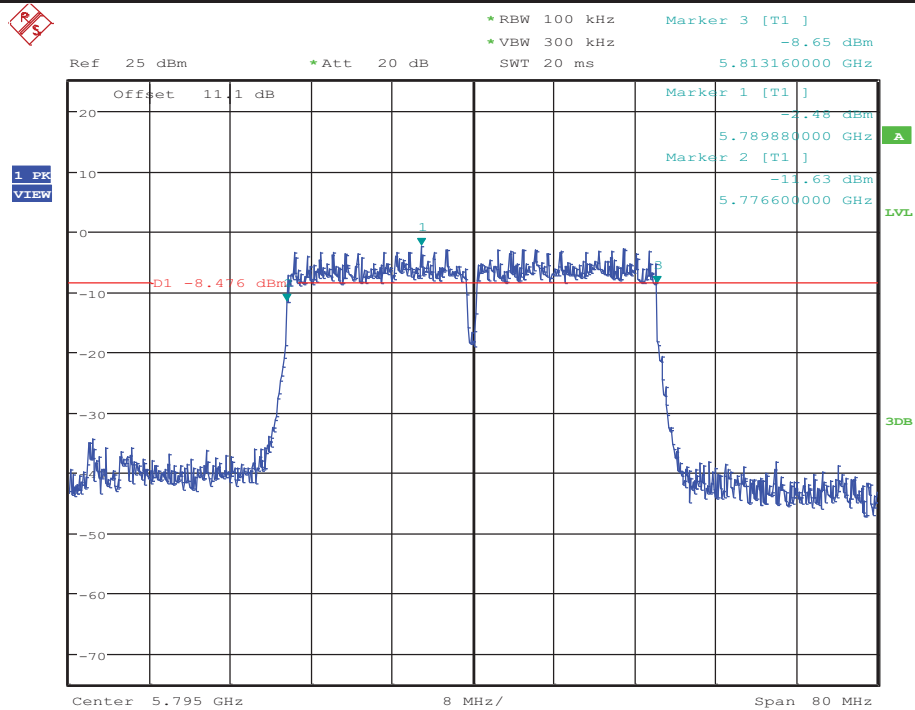


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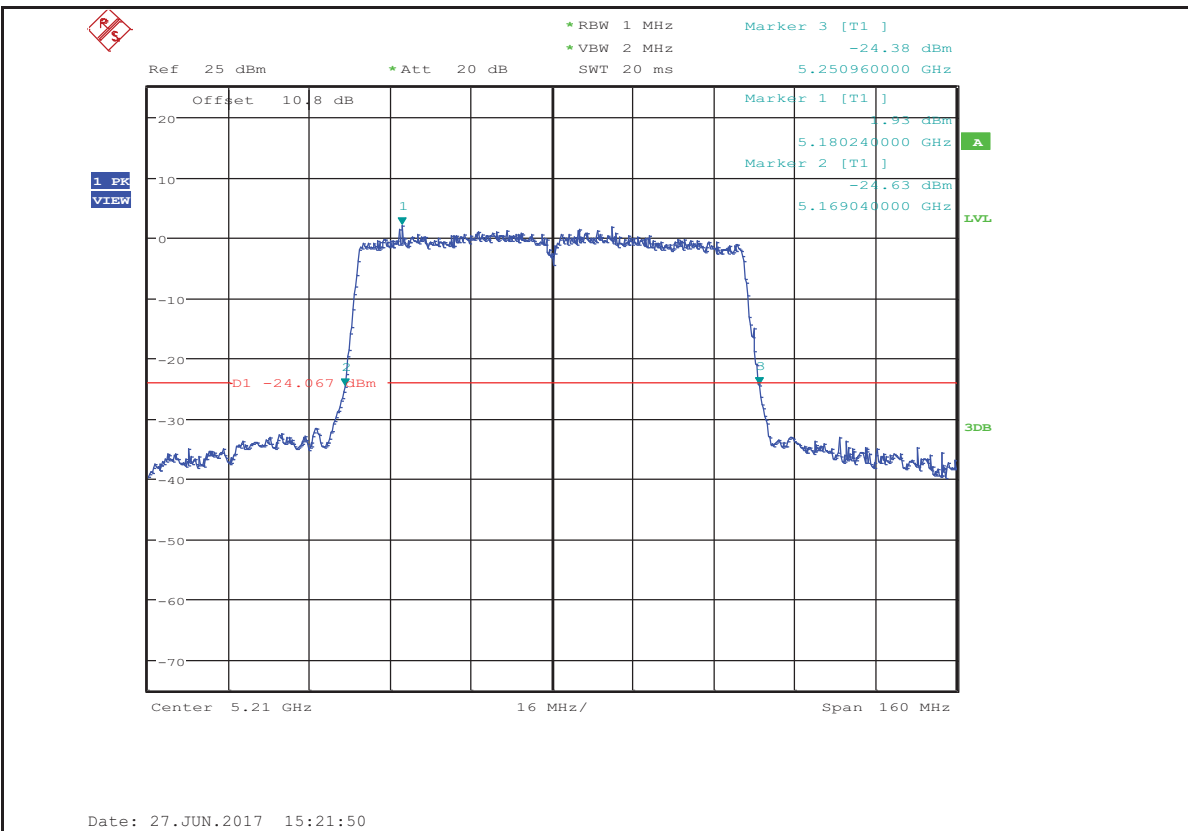
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Emission Bandwidth Measurement_11AC40MIMO_5795_Ant2

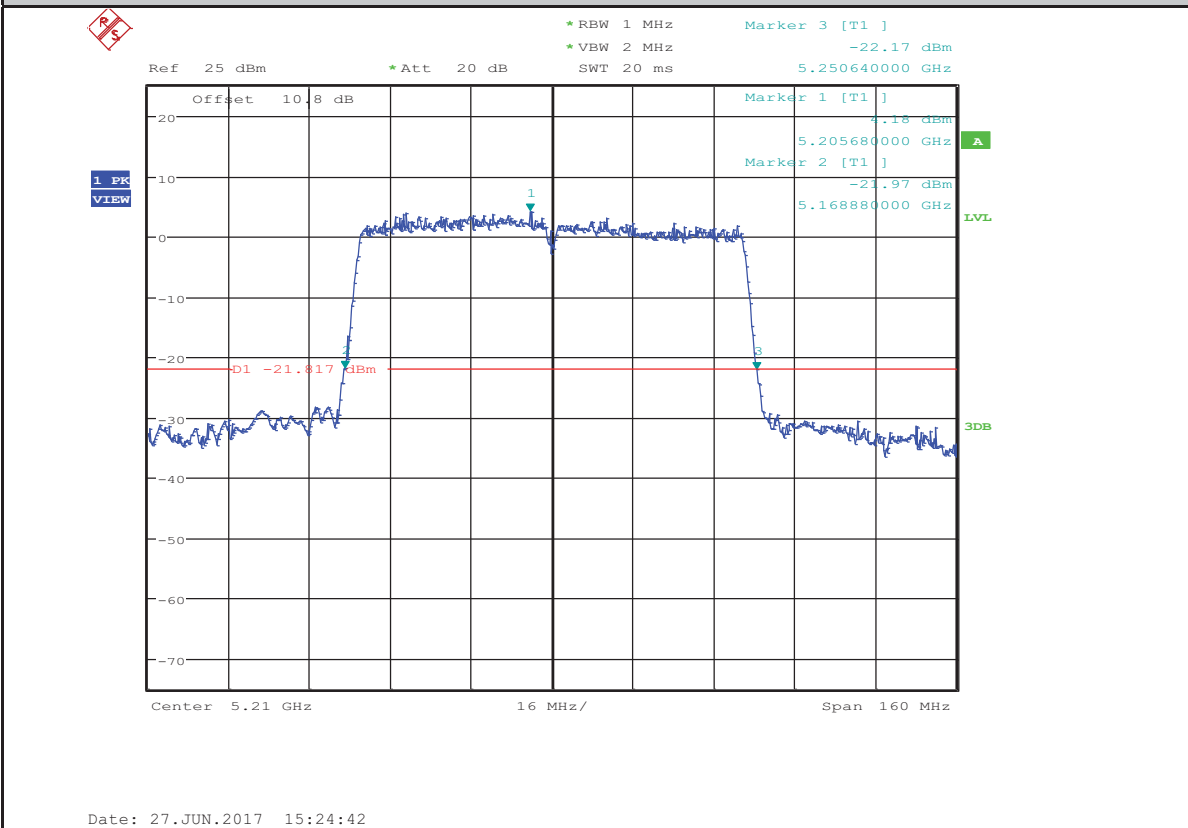


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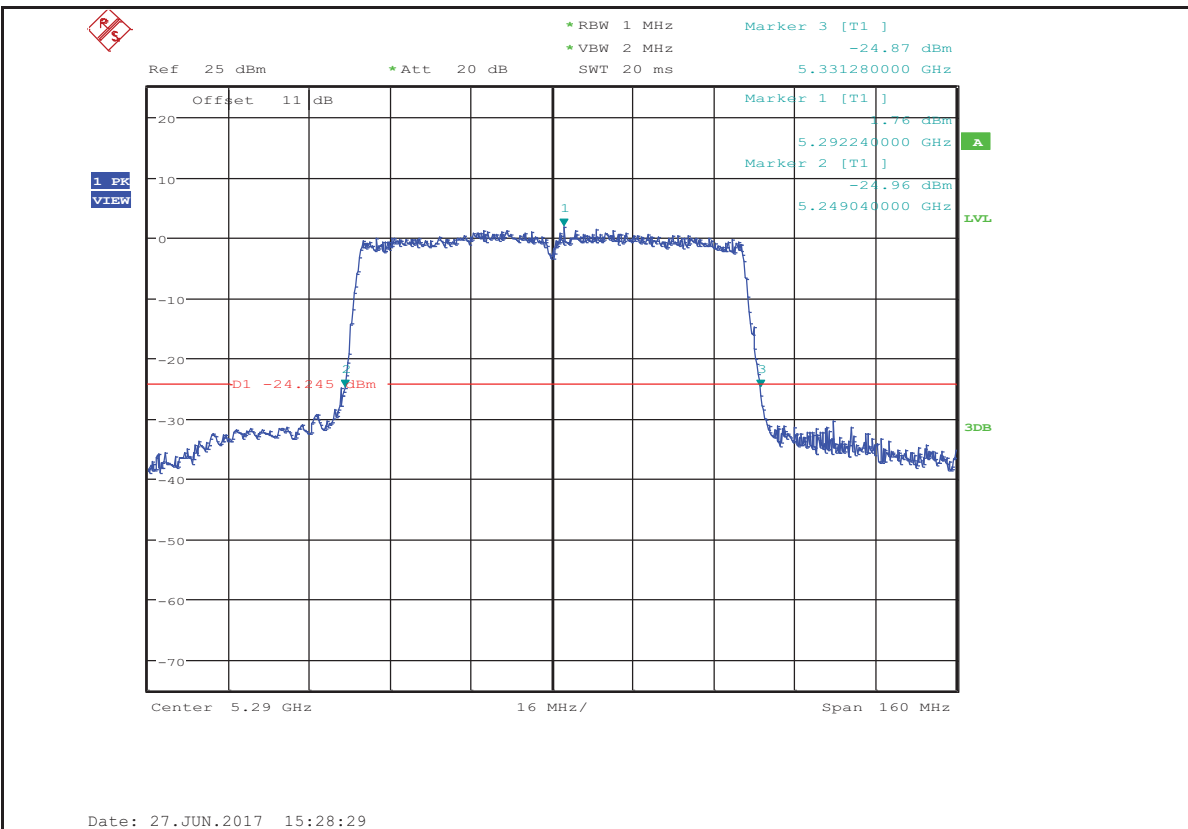
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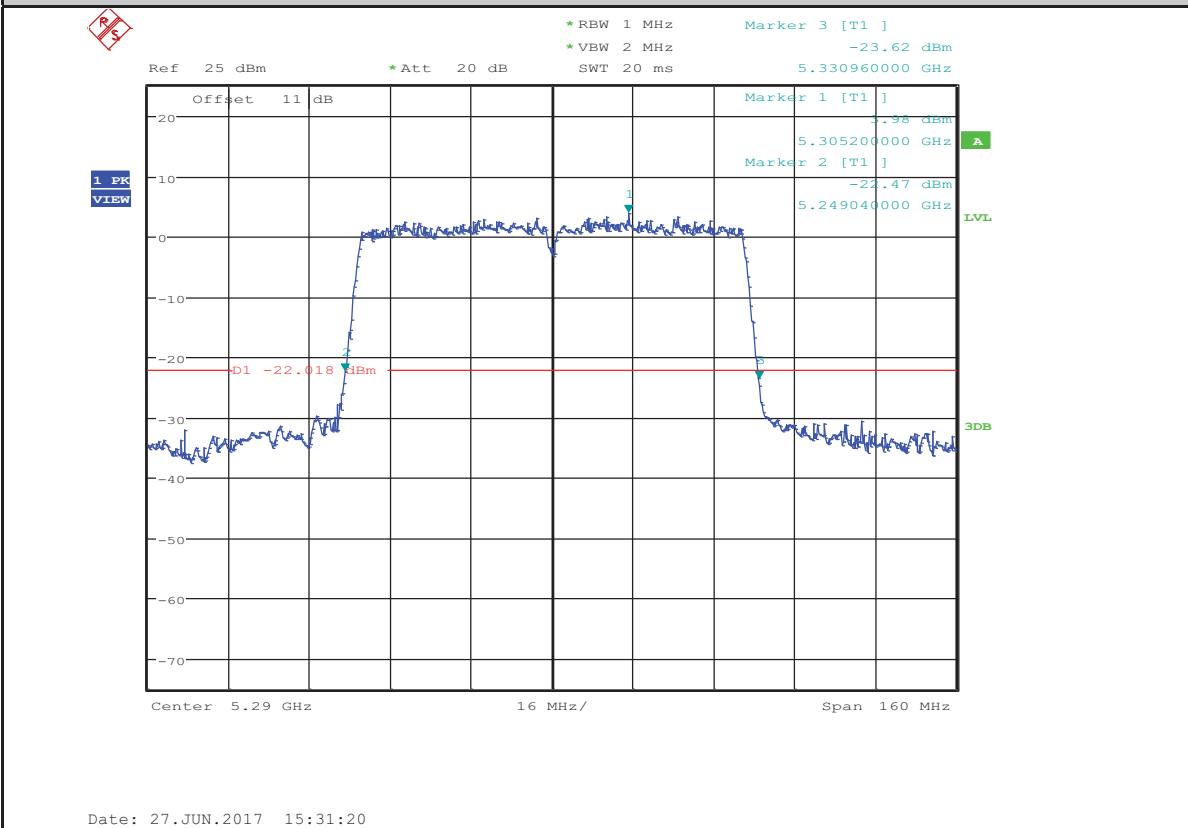
Emission Bandwidth Measurement_11AC80MIMO_5210_Ant2



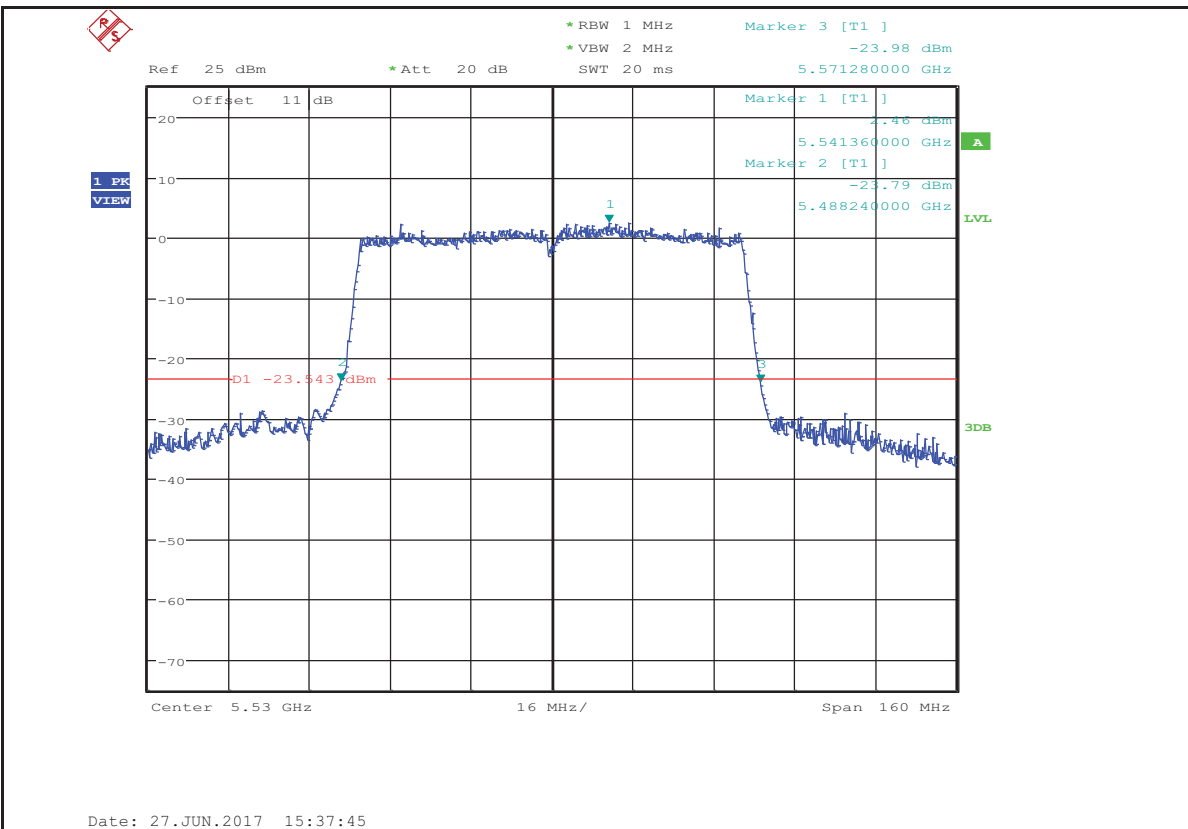
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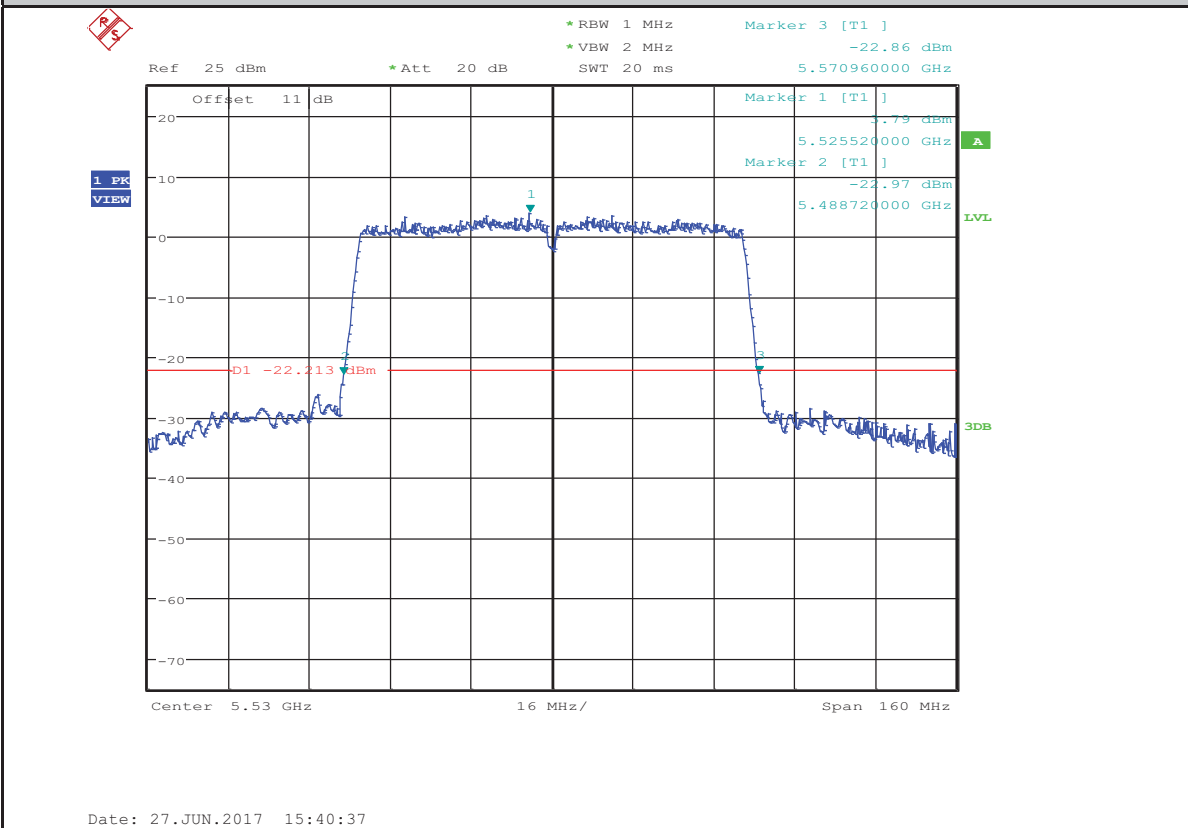
Emission Bandwidth Measurement_11AC80MIMO_5290_Ant2



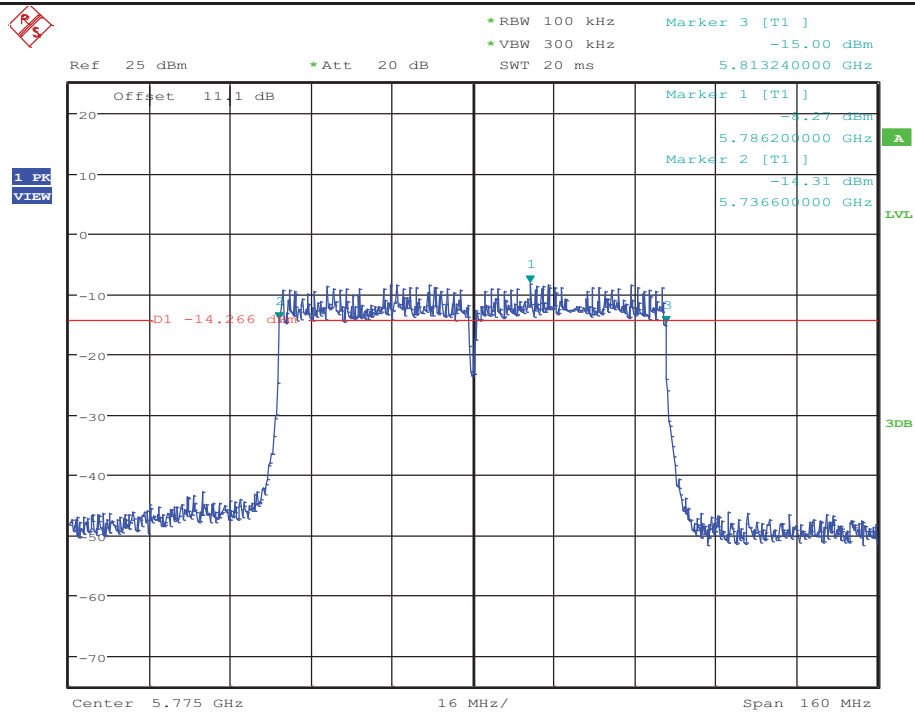
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Emission Bandwidth Measurement_11AC80MIMO_5530_Ant2

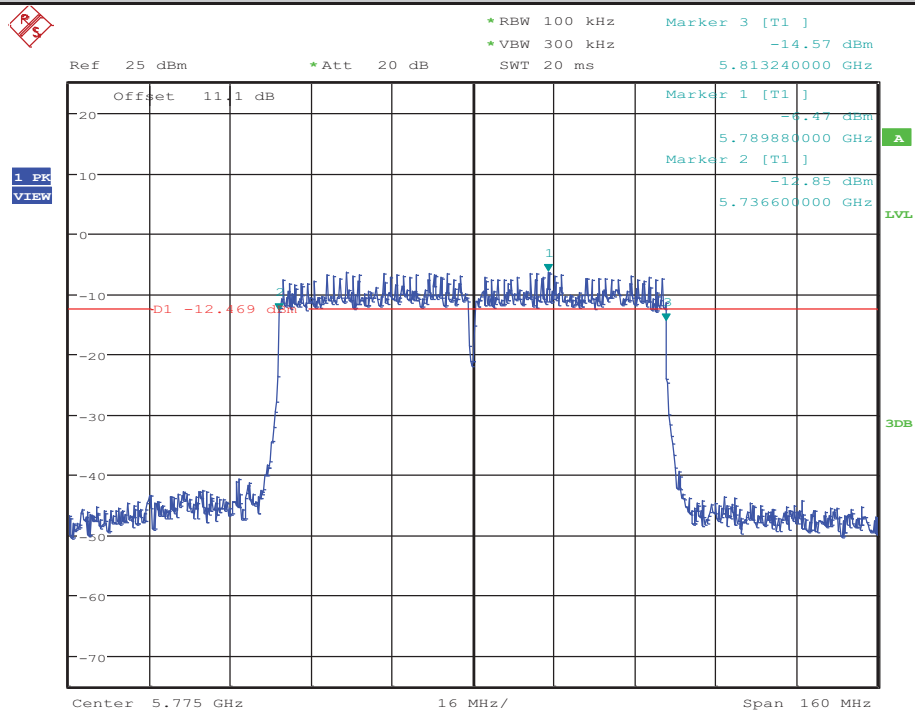


Emission Bandwidth Measurement_11AC80MIMO_5775_Ant1



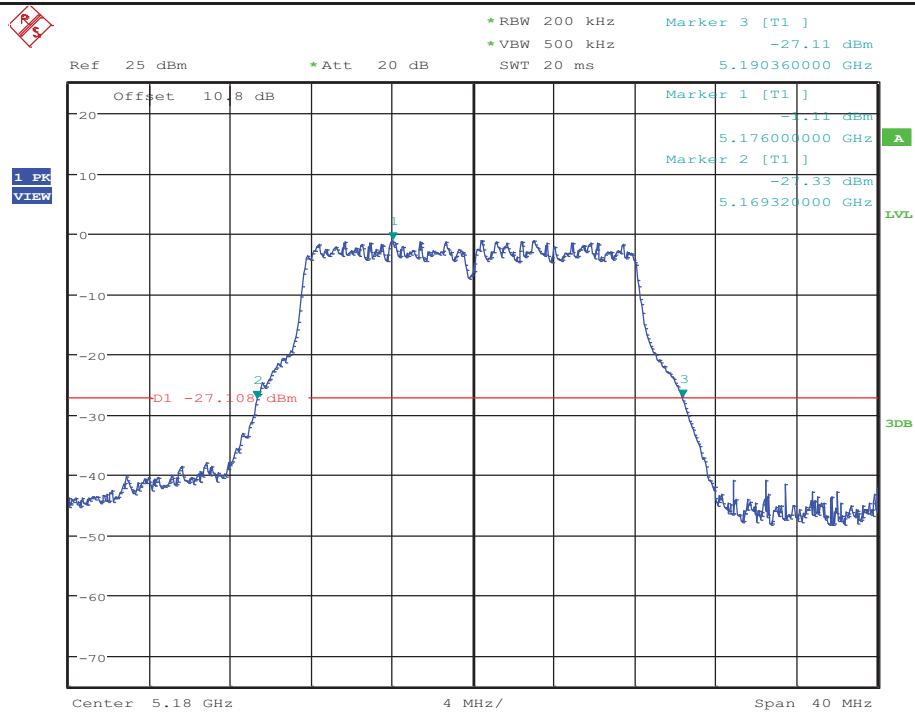
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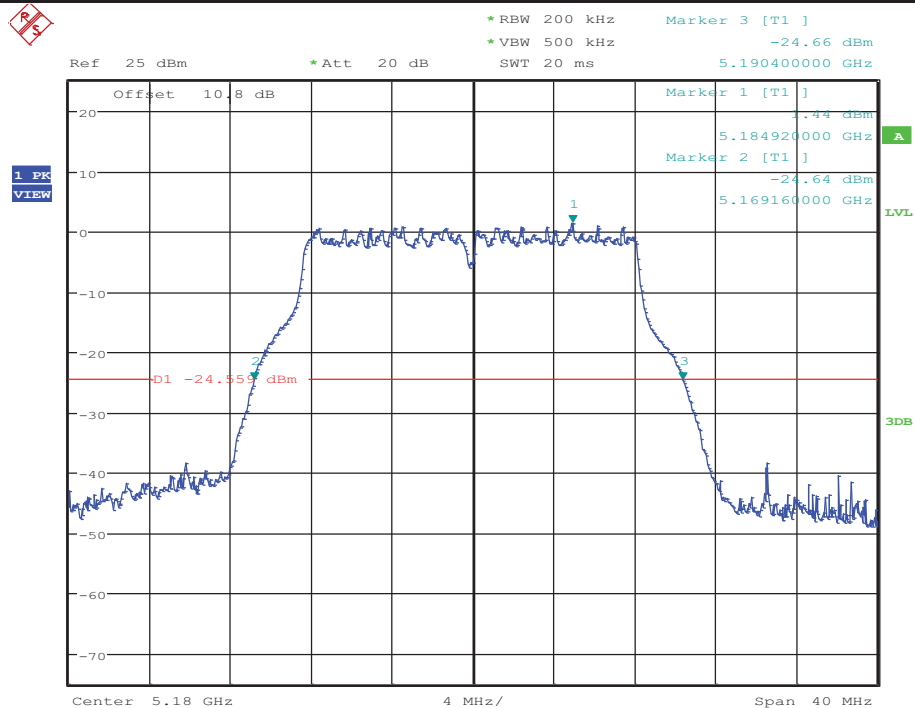
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Emission Bandwidth Measurement_11AMIMO_5180_Ant1



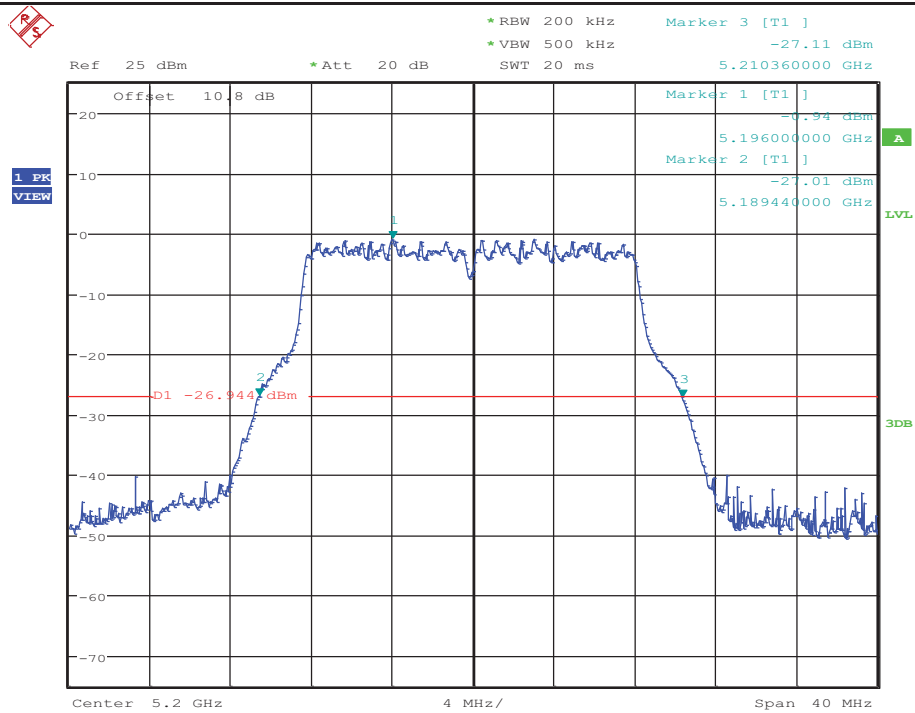
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Emission Bandwidth Measurement_11AMIMO_5180_Ant2



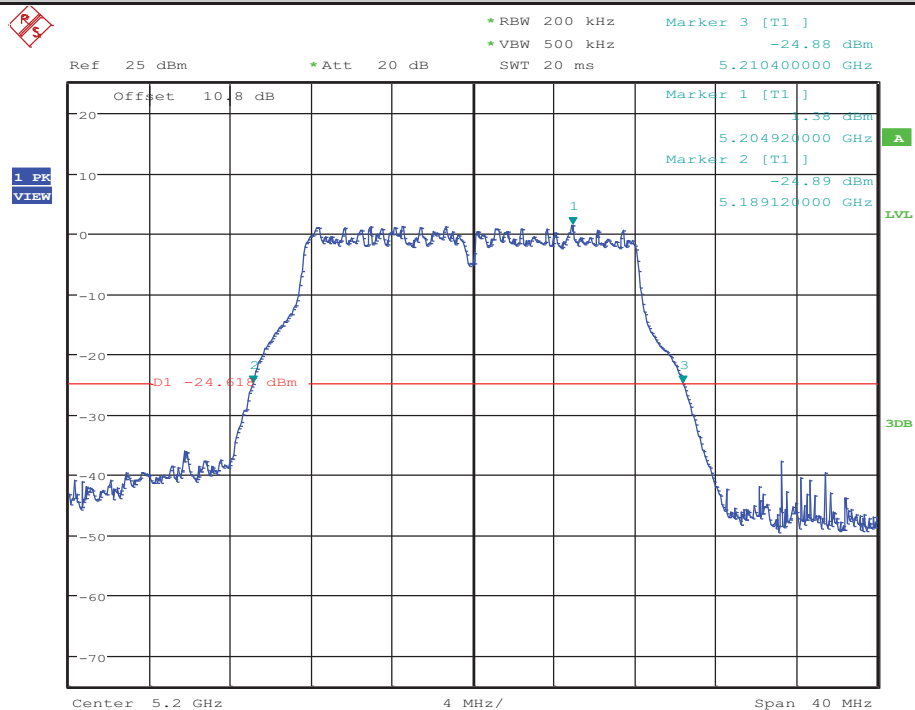
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Emission Bandwidth Measurement_11AMIMO_5200_Ant1



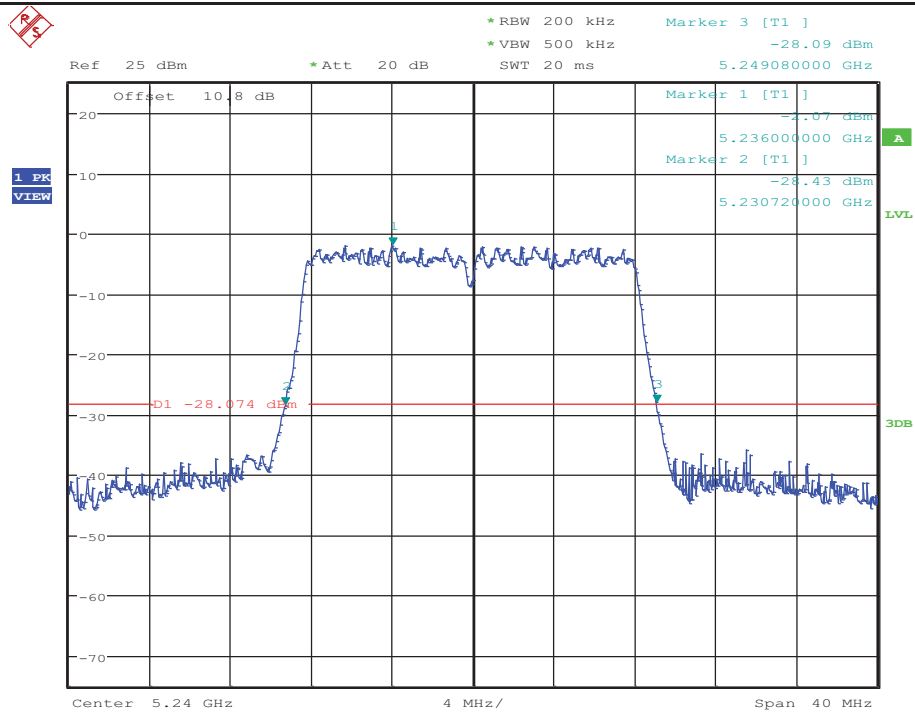
Date: 26.JUN.2017 19:18:09

Emission Bandwidth Measurement_11AMIMO_5200_Ant2



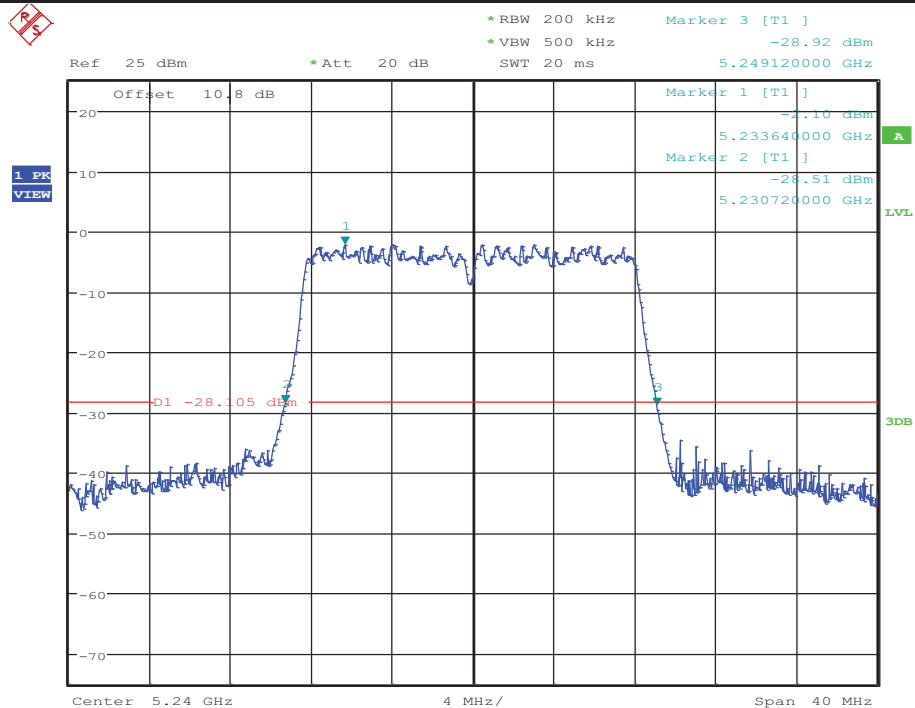
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Emission Bandwidth Measurement_11AMIMO_5240_Ant1



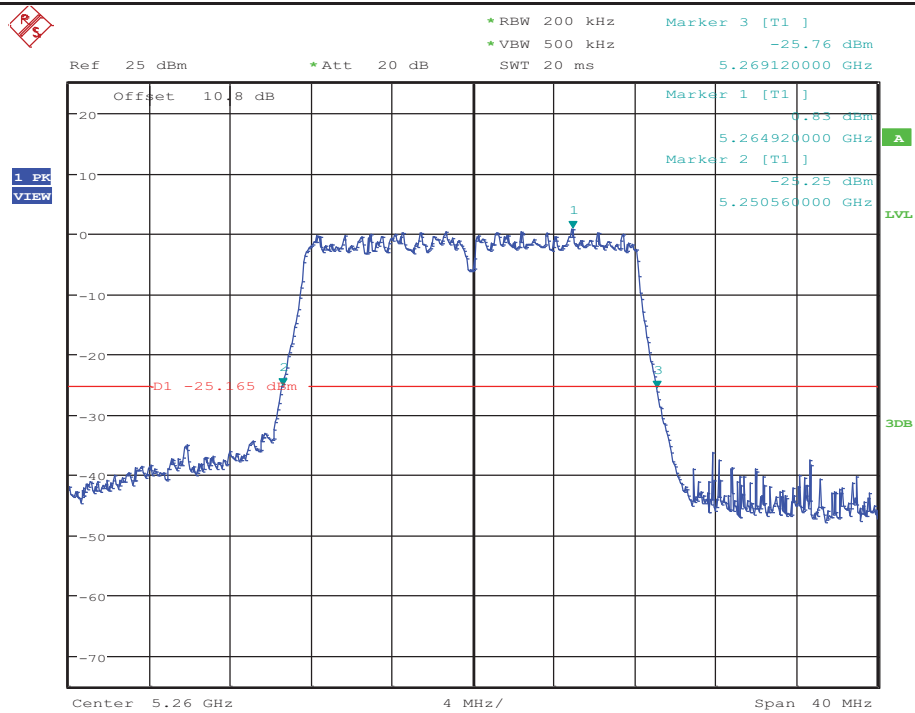
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Emission Bandwidth Measurement_11AMIMO_5240_Ant2



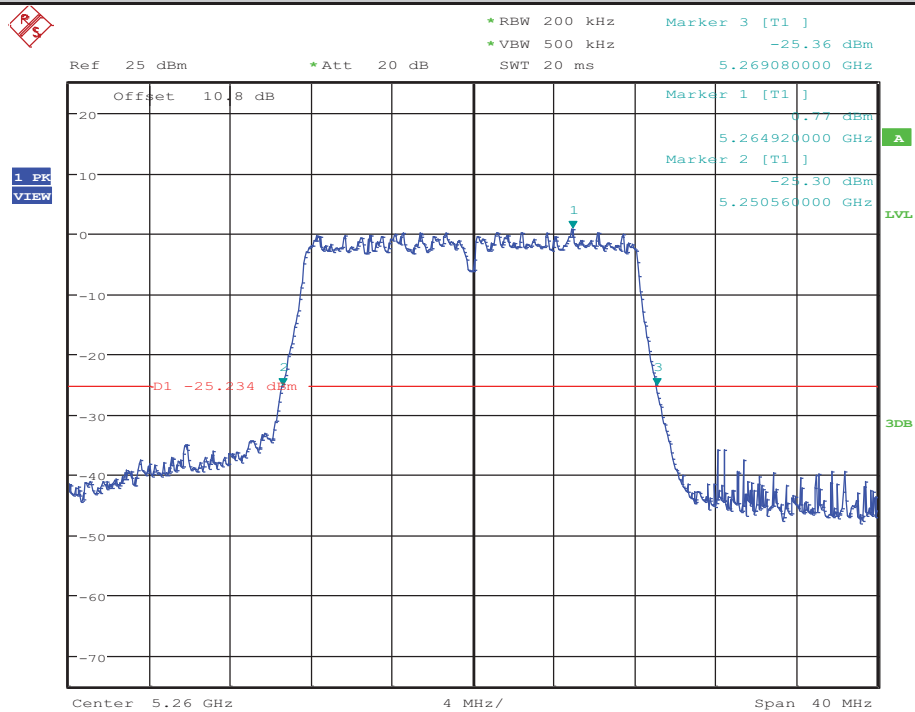
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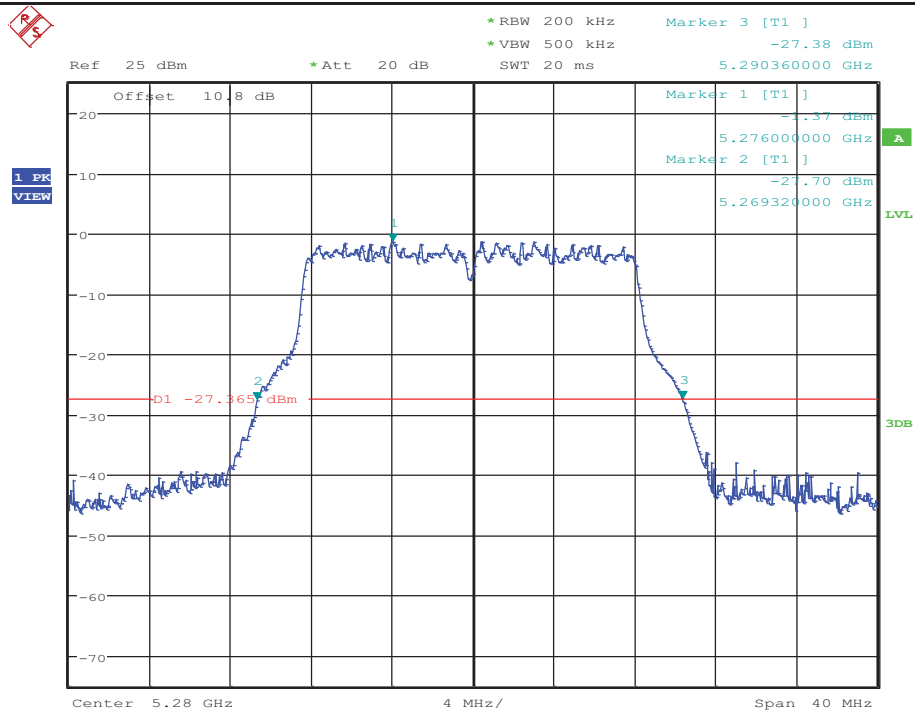
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Emission Bandwidth Measurement_11AMIMO_5260_Ant2



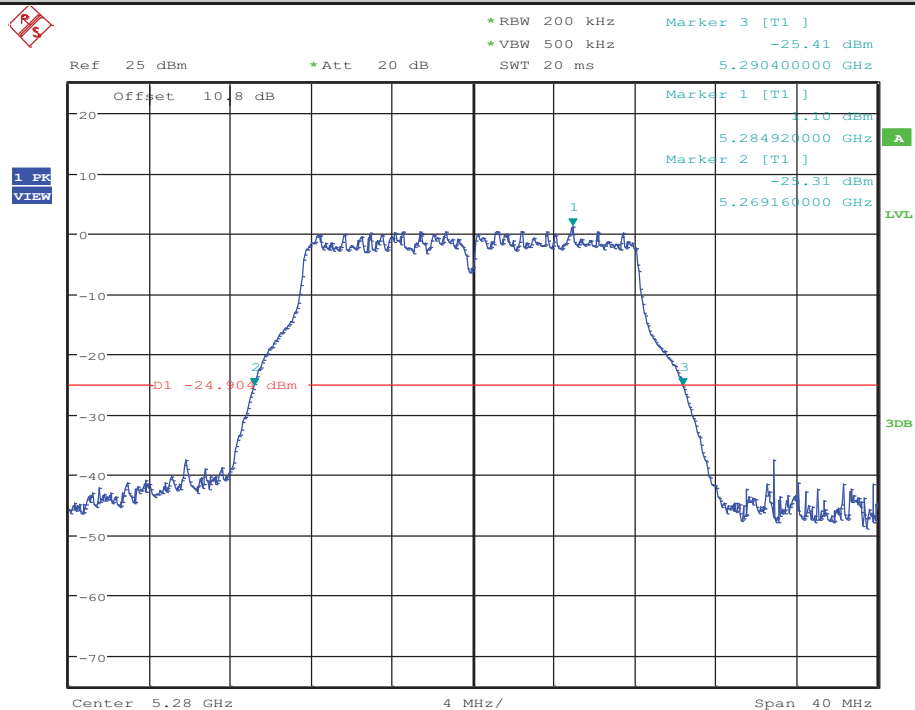
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Emission Bandwidth Measurement_11AMIMO_5280_Ant1



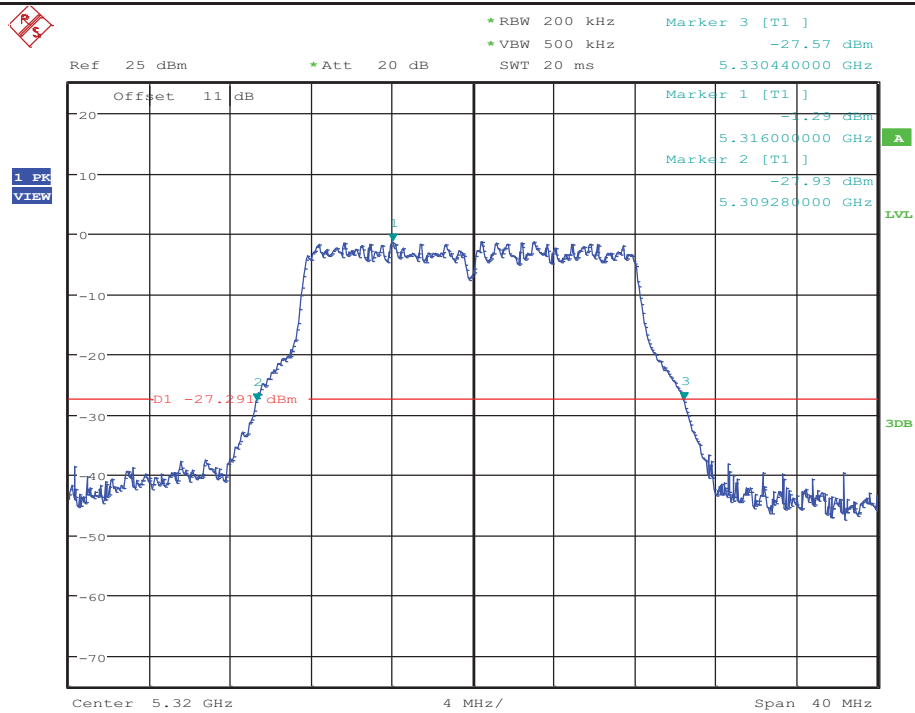
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Emission Bandwidth Measurement_11AMIMO_5280_Ant2



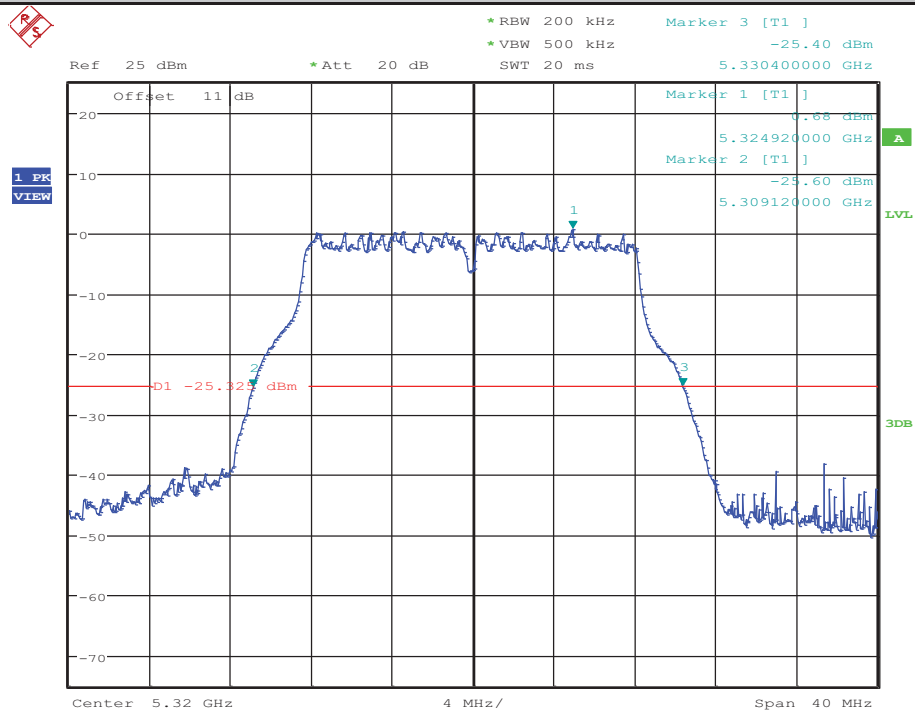
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Emission Bandwidth Measurement_11AMIMO_5320_Ant1



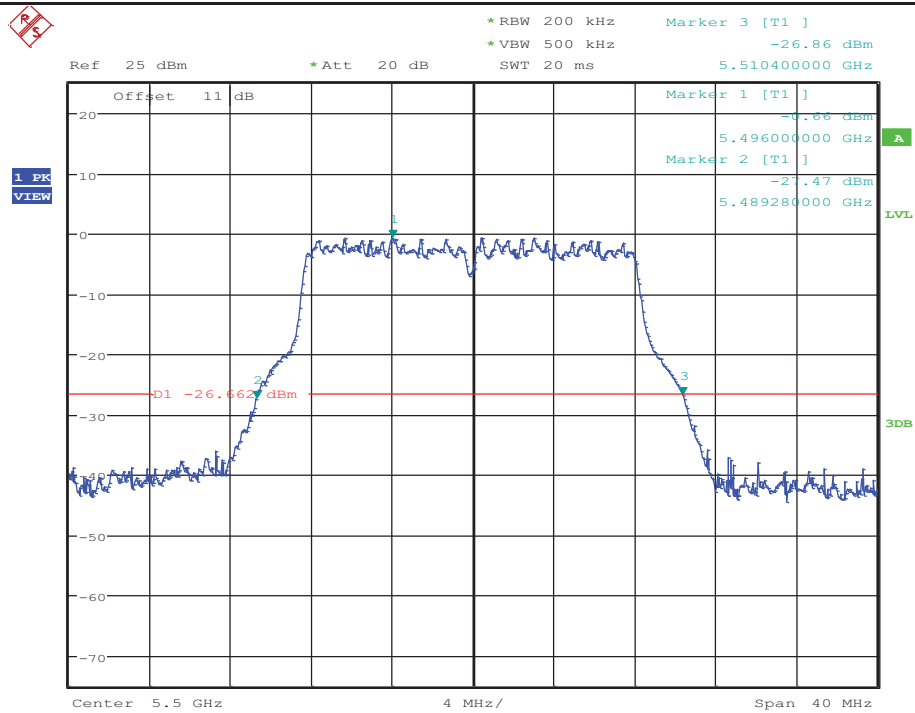
Date: 26.JUN.2017 19:44:35

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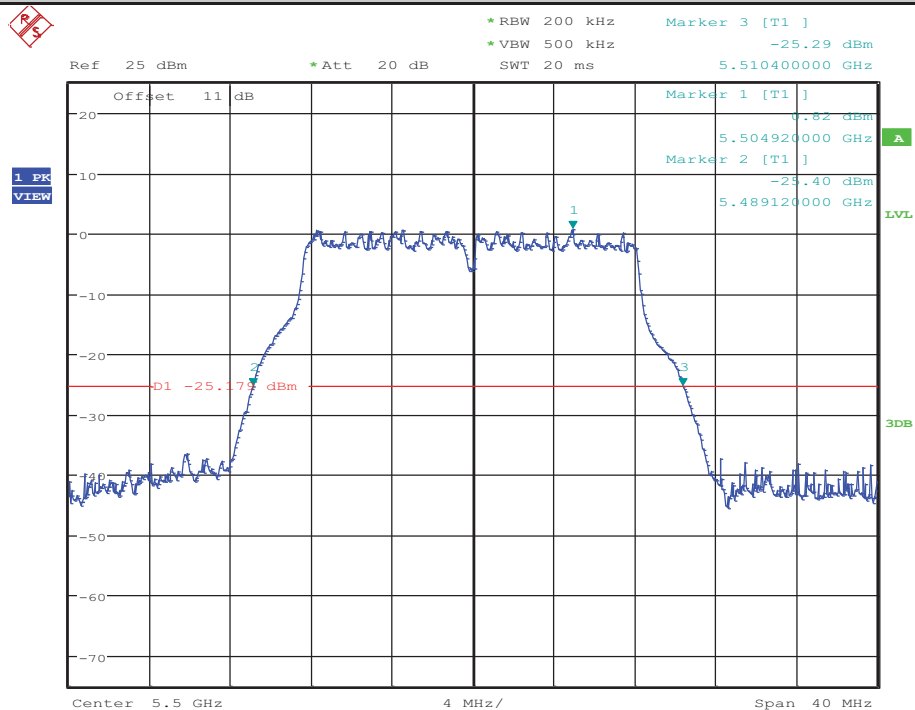
Date: 26.JUN.2017 19:47:26

Emission Bandwidth Measurement_11AMIMO_5500_Ant1



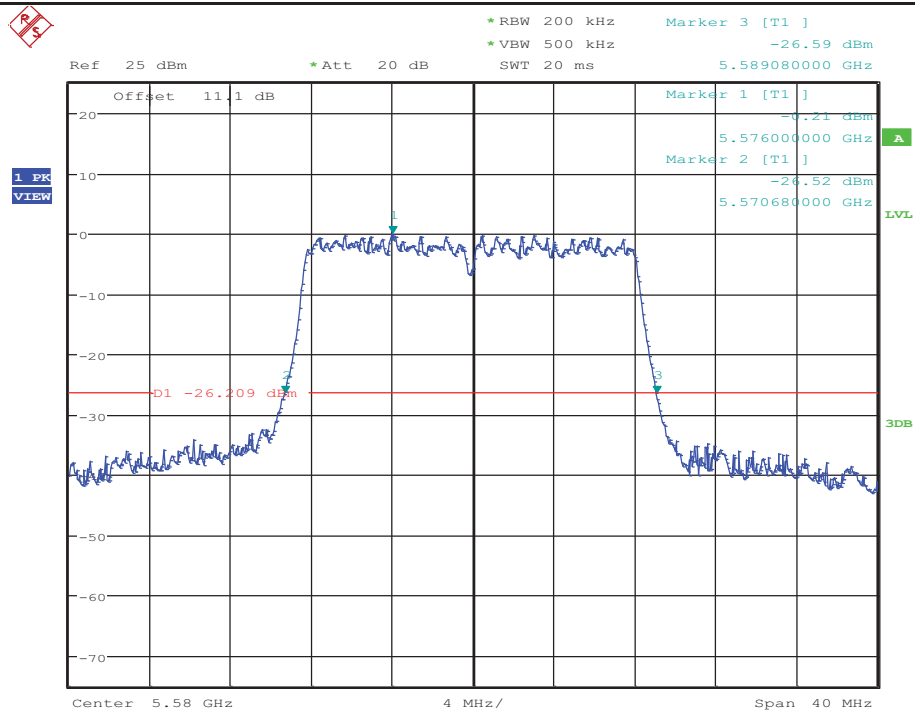
Date: 26.JUN.2017 20:25:01

Emission Bandwidth Measurement_11AMIMO_5500_Ant2



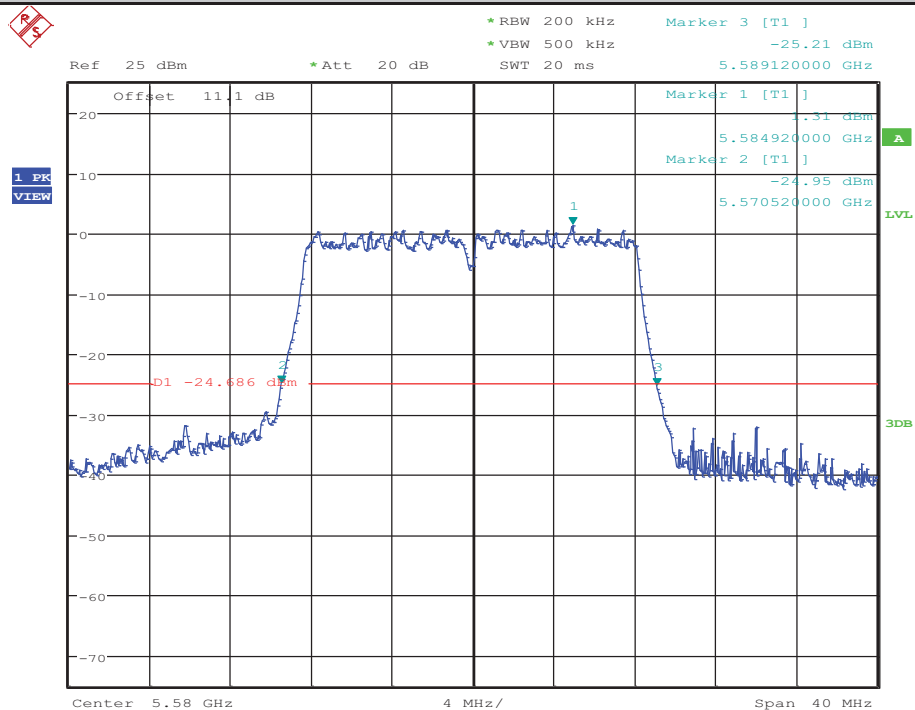
Date: 26.JUN.2017 20:27:51

Emission Bandwidth Measurement_11AMIMO_5580_Ant1



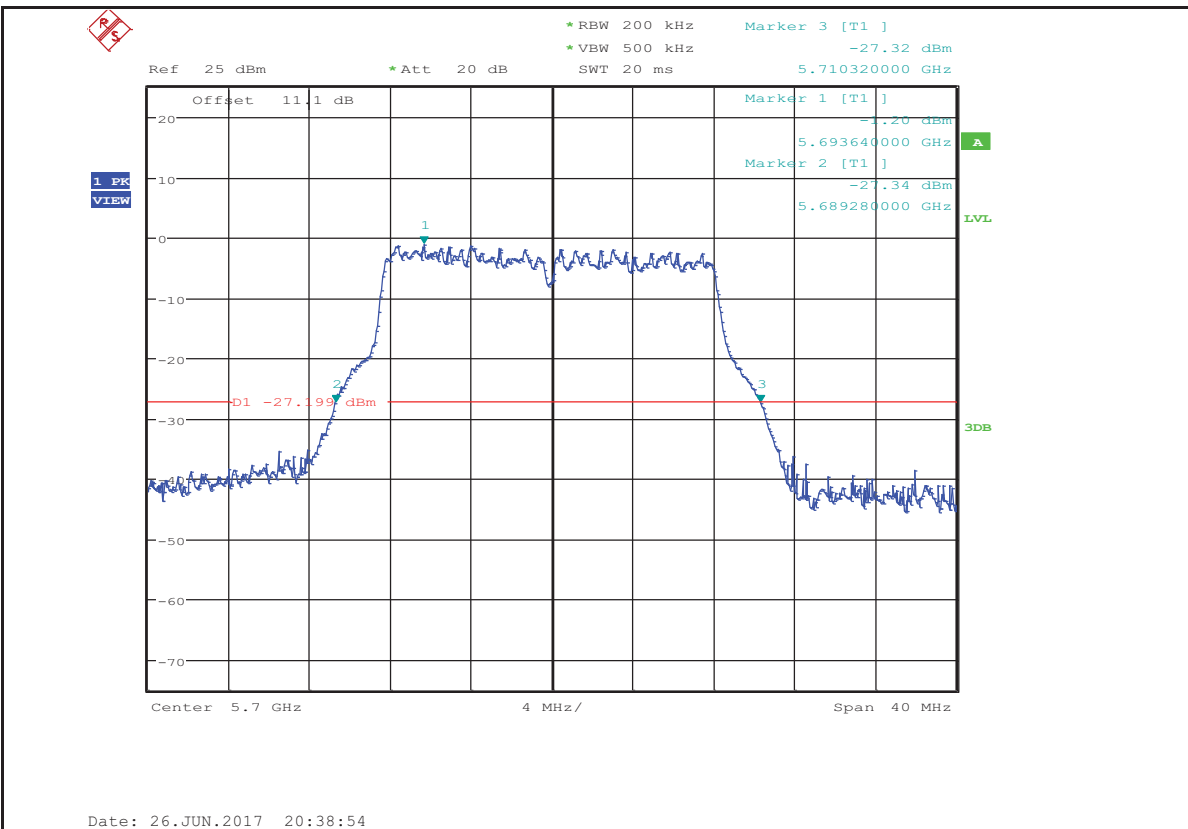
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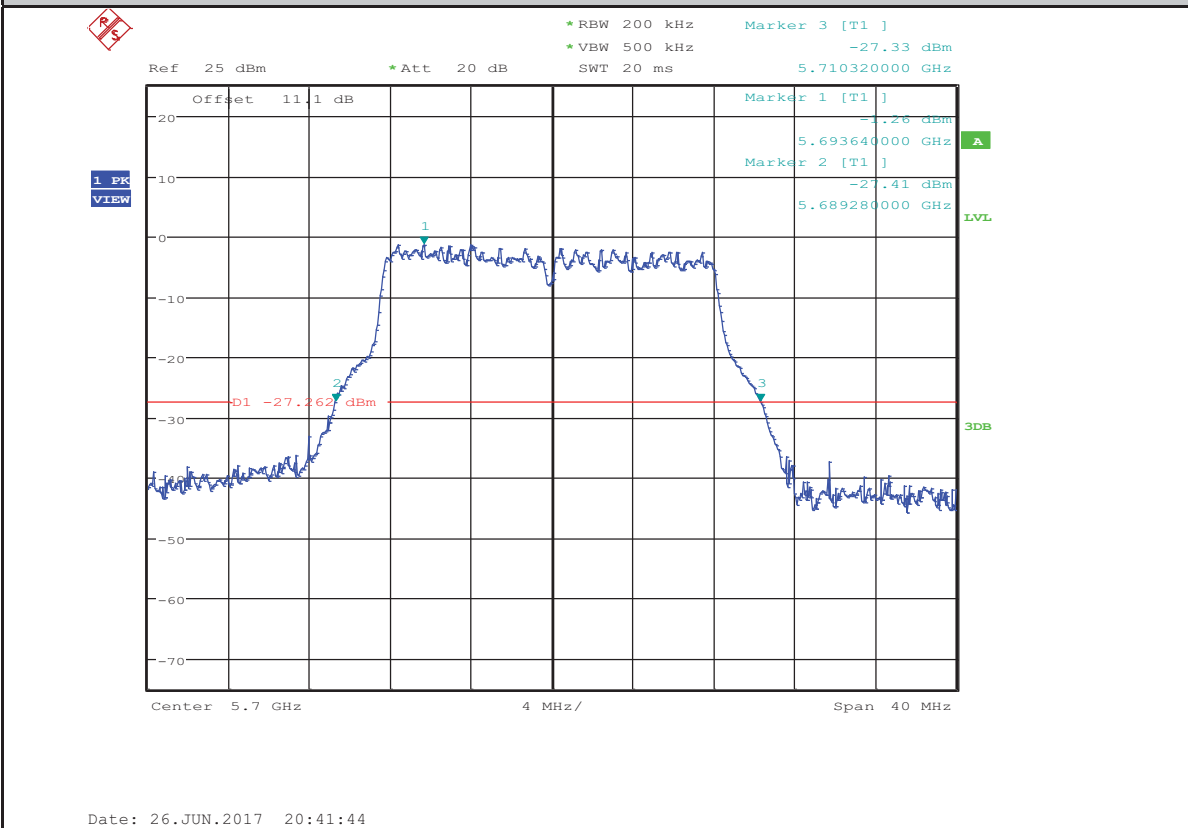


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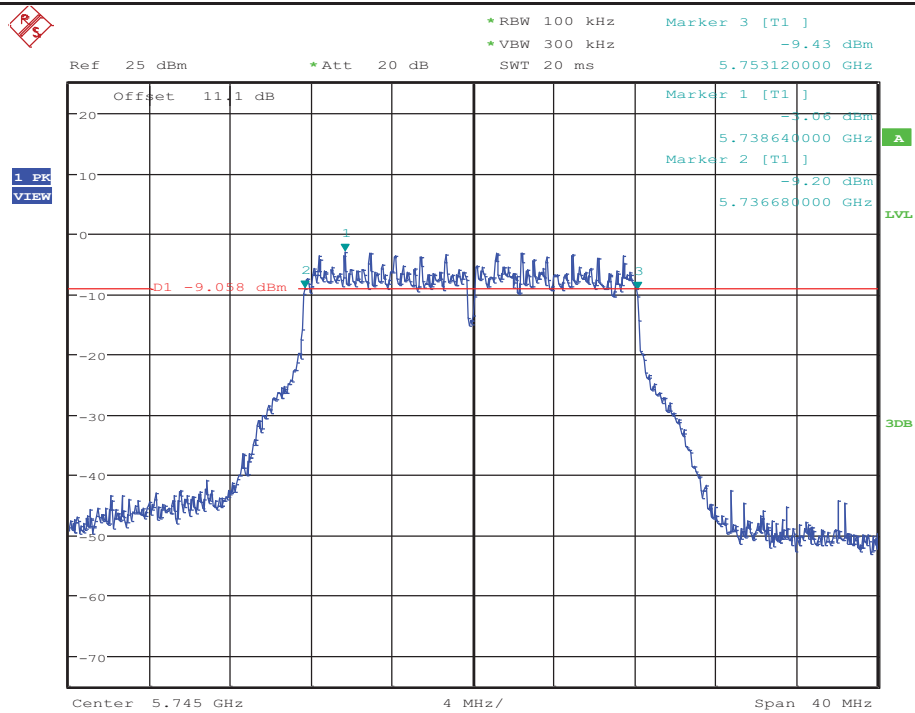
Emission Bandwidth Measurement_11AMIMO_5700_Ant1



Emission Bandwidth Measurement_11AMIMO_5700_Ant2

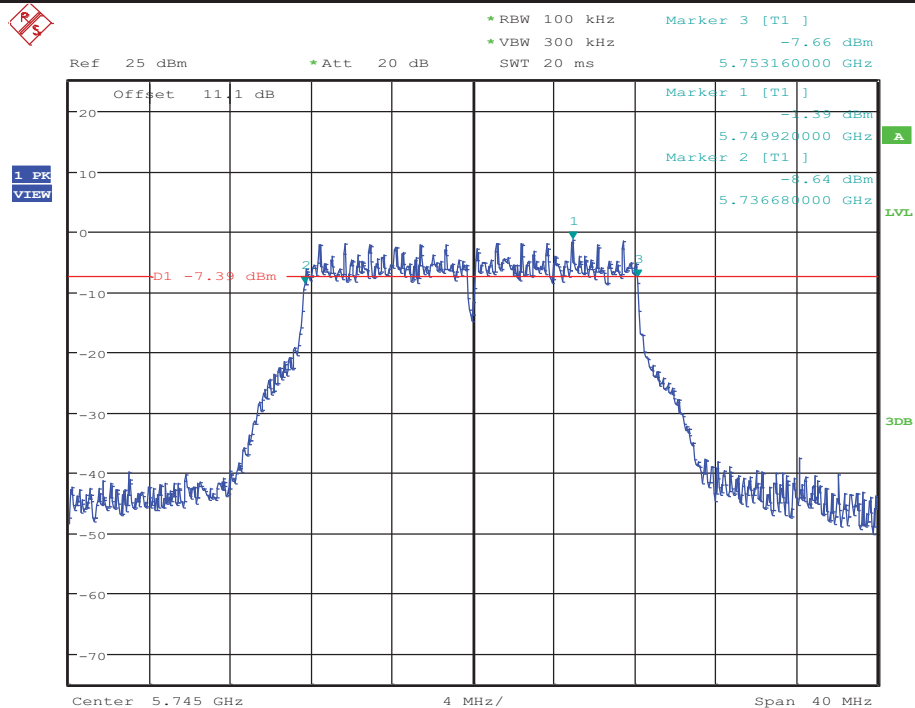


Emission Bandwidth Measurement_11AMIMO_5745_Ant1



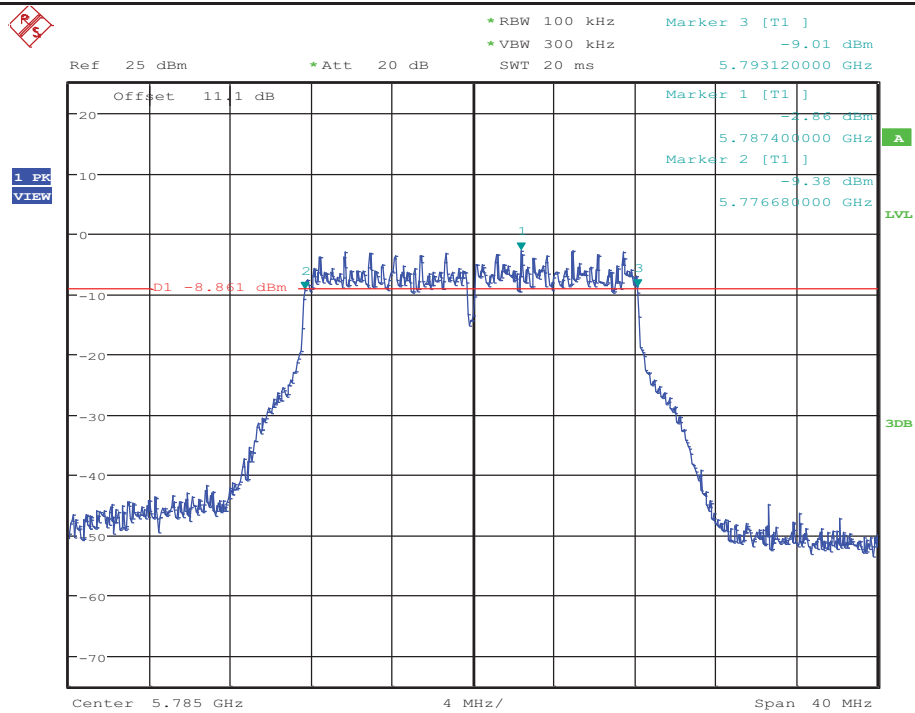
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Emission Bandwidth Measurement_11AMIMO_5745_Ant2



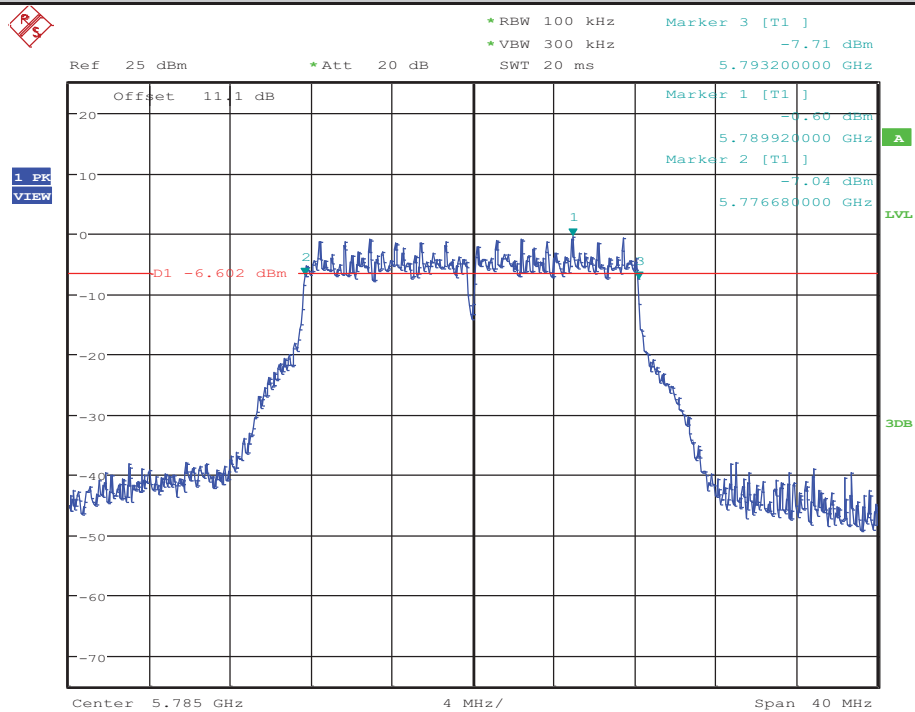
Date: 26.JUN.2017 20:46:55

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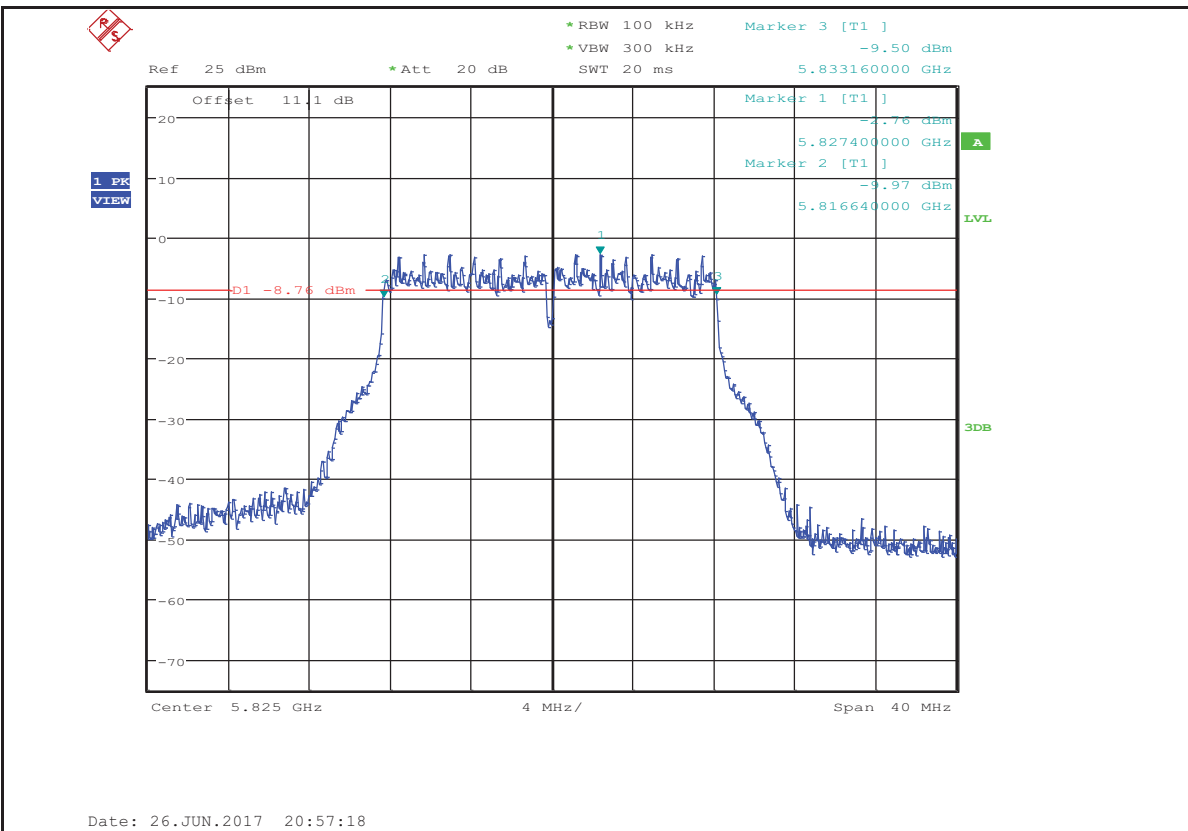
Date: 26.JUN.2017 20:52:07

Emission Bandwidth Measurement_11AMIMO_5785_Ant2



Date: 26.JUN.2017 20:54:02

Emission Bandwidth Measurement_11AMIMO_5825_Ant1



Emission Bandwidth Measurement_11AMIMO_5825_Ant2

