

FCC CERTIFICATION TEST REPORT

FOR

Applicant	:	Yunke China Information Technology Limited
Address	:	Digital Technology Plaza, No. 9 shangdi 9th street, Haidian District Beijing China
Equipment under Test	:	Outdoor Access Point
Model No.	:	WL8200-IT3
Trade Mark	:	DCN
FCC ID	:	2AM4IWL8200-IT3
Manufacturer	:	Yunke China Information Technology Limited
Address	:	Digital Technology Plaza, No. 9 shangdi 9th street, Haidian District Beijing China

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

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REPORT

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TEST REPORT DECLARE

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Trade Mark	:	DCN
Manufacturer	:	Yunke China Information Technology Limited
Address	:	Digital Technology Plaza, No. 9 shangdi 9th street, Haidian District Beijing China

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

Test procedure used: ANSI C63.10:2013, 789033 D02 General UNII Test Procedures New Rules v01

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-R18080906-1E5		
Date of Receipt:	Aug. 17, 2018	Date of Test:	Aug. 17, 2018 ~ Sep. 19, 2018

Prepared By:

Ella Gong
Ella Gong/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	Sep. 19, 2018	

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	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
Emissions in restricted frequency bands	FCC 15.407 (a) FCC 15.209 FCC 15.205	PASS
Band Edge Compliance	FCC 15.407 (a) FCC 15.209 FCC 15.205	PASS
Power Line Conducted Emission	FCC 15.207	N/A
Antenna requirement	FCC 15.203	PASS
Dynamic Frequency Selection	FCC 15.407 (h)	N/A
N/A is an abbreviation for Not Applicable.		

2. General test information

2.1. Description of EUT

EUT* Name	: Outdoor Access Point
Model Number	: WL8200-IT3
EUT function description	: Please reference user manual of this device
Power supply	: 48V DC from POE Network switch
Radio Technology	: IEEE802.11n/a/ac
Operation frequency	: IEEE 802.11a: 5180MHz-5240MHz, 5745MHz-5825MHz IEEE 802.11n HT20: 5180MHz-5240MHz, 5745MHz-5825MHz IEEE 802.11n HT40: 5190MHz-5230MHz, 5755MHz-5795MHz IEEE 802.11ac HT20: 5180MHz-5240MHz, 5745MHz-5825MHz IEEE 802.11ac HT40: 5190MHz-5230MHz, 5755MHz-5795MHz IEEE 802.11ac HT80: 5210MHz, 5775MHz
Modulation	: IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: 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 300 Mbps IEEE 802.11ac VHT20: up to 150 Mbps, VHT40: up to 300 Mbps VHT80: up to 886.7 Mbps
Antenna Type	: Antenna 1: Internal antenna, maximum PK gain: 8dBi Antenna 2: Internal antenna, maximum PK gain: 8dBi The EUT incorporates a MIMO function. Physically, it provides two completed transmitters and receivers(2T2R), two transmit signals are completely uncorrelated, then, Direction gain=GANT
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
N/A	N/A	N/A	N/A	N/A

2.3. Assistant equipment used for test

Assistant equipment	Manufacturer	Model number	EMC Compliance	SN
Notebook	DELL	Latitude D610	FCC DOC	00045-534-136-300

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 “QRCT.EXE” to control EUT work in Continuous Tx mode, 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	16	6	Low :CH36	5180
	16	6	Middle: CH40	5200
	17	6	High: CH48	5240
	17	6	Low :CH149	5745
	17	6	Middle: CH157	5785
	17	6	High: CH165	5825
IEEE 802.11n HT20	16	MCS 8	Low :CH36	5180
	16	MCS 8	Middle: CH40	5200
	17	MCS 8	High: CH48	5240
	17	MCS 8	Low :CH149	5745
	17	MCS 8	Middle: CH157	5785
	17	MCS 8	High: CH165	5825
IEEE 802.11n HT40	15	MCS 8	Low :CH36	5190
	16	MCS 8	High: CH44	5230
	16	MCS 8	Low: CH149	5755
	16	MCS 8	High: CH157	5795
IEEE 802.11ac VHT20	16	NSS1 MCS 8	Low :CH36	5180
	16	NSS1 MCS 8	Middle: CH40	5200
	17	NSS1 MCS 8	High: CH48	5240
	17	NSS1 MCS 8	Low :CH149	5745
	17	NSS1 MCS 8	Middle: CH157	5785
	17	NSS1 MCS 8	High: CH165	5825
IEEE 802.11ac VHT40	15	NSS1 MCS 8	Low :CH36	5190
	15	NSS1 MCS 8	High: CH44	5230
	15	NSS1 MCS 8	Low: CH149	5755
	16	NSS1 MCS 8	High: CH157	5795
IEEE 802.11ac VHT80	9	NSS1 MCS 8	CH36	5210
	9	NSS1 MCS 8	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>, 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

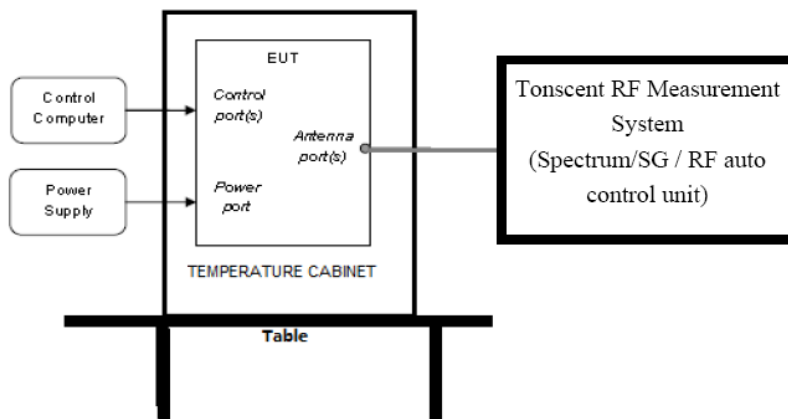
Test Item	Uncertainty
Bandwidth	1.1%
Peak Output Power(Conducted)(Spectrum analyzer)	0.86dB (10 MHz ≤ f < 3.6GHz); 1.38dB (3.6GHz ≤ f < 8GHz)
Peak Output Power(Conducted)(Power Sensor)	0.74dB
Power Spectral Density	0.74dB (10 MHz ≤ f < 3.6GHz); 1.38dB (3.6GHz ≤ f < 8GHz)
Frequencies Stability	6.7 × 10 ⁻⁸ (Antenna couple method) 5.5 × 10 ⁻⁸ (Conducted method)
Conducted spurious emissions	0.86dB (10 MHz ≤ f < 3.6GHz); 1.40dB (3.6GHz ≤ f < 8GHz) 1.66dB (8GHz ≤ f < 22GHz)
Uncertainty for radio frequency (RBW<20kHz)	3×10 ⁻⁸
Temperature	0.4℃
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-40GHz)	4.10dB (1-6GHz) 4.40dB (6GHz-18GHz) 3.54dB (18GHz-26GHz) 4.30dB (26GHz-40GHz)
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 (Tonscend RF Measurement System)					
Spectrum analyzer	R&S	FSU26	200071	Oct. 23, 2017	1 Year
Wideband Radio Communication tester	R&S	CMW500	117491	Jun. 29, 2018	1 Year
Vector Signal Generator	Agilent	E8267D	US49060192	Oct. 23, 2017	1 Year
Vector Signal Generator	Agilent	N5182A	MY48180737	Jun. 29, 2018	1 Year
Power Sensor	Agilent	U2021XA	MY55150010	Oct. 21, 2017	1 Year
Power Sensor	Agilent	U2021XA	MY55150011	Oct. 23, 2017	1 Year
DC Power Source	MATRIS	MPS-3005L-3	D813058W	Aug. 18, 2018	1 Year
Attenuator	Mini-Circuits	BW-S10W2	101109	Aug. 18, 2018	1 Year
RF Cable	Micable	C10-01-01-1	100309	Oct. 21, 2017	1 Year
Temp&Humi Programmable	ZHIXIANG	ZXGDJS-150 L	ZX170110-A	Oct. 21, 2017	1 Year
Test Software	JS Tonscend	JS1120-3	Ver.2.7	N/A	N/A
Radiated Emission Test Chamber 1#					
EMI Test Receiver	R&S	ESU8	100316	Oct. 21, 2017	1 Year
Spectrum analyzer	Agilent	E4447A	MY50180031	Jun. 29, 2018	1 Year
Trilog Broadband Antenna	Schwarzbeck	VULB9163	9163-462	Nov. 09, 2017	1 Year
Active Loop antenna	Schwarzbeck	FMZB-1519	1519-038	Oct. 17, 2017	1 Year
Double Ridged Horn Antenna	R&S	HF907	100276	Oct. 17, 2017	1 Year
Broad Band Horn Antenna	Schwarzbeck	BBHA 9170	790	Nov. 09, 2017	1 Year
Pre-amplifier	A.H.	PAM-0118	360	Oct. 21, 2017	1 Year
Pre-amplifier	TERA-MW	TRLA-0040G 35	101303	Oct. 21, 2017	1 Year
RF Cable	HUBSER	CP-X2+ CP-X1	W11.03+ W12.02	Oct. 21, 2017	1 Year
RF Cable	N/A	SMAJ-SMAJ-1M+ 11M	17070133+17070131	Nov. 08, 2017	1 Year
MI Cable	HUBSER	C10-01-01-1 M	1091629	Oct. 21, 2017	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. 21, 2017	1 Year
LISN 1	R&S	ENV216	101109	Oct. 21, 2017	1 Year
LISN 2	R&S	ESH2-Z5	100309	Oct. 21, 2017	1 Year
Pulse Limiter	R&S	ESH3-Z2	101242	Oct. 21, 2017	1 Year
CE Cable 1	HUBSER	N/A	W10.01	Oct. 21, 2017	1 Year
Test software	Audix	E3	V 6.11111b	N/A	N/A

4. 6/26dB 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
	Minimum 500kHz 6dB 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 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 or 6dB relative to the maximum level measured in the fundamental emission.

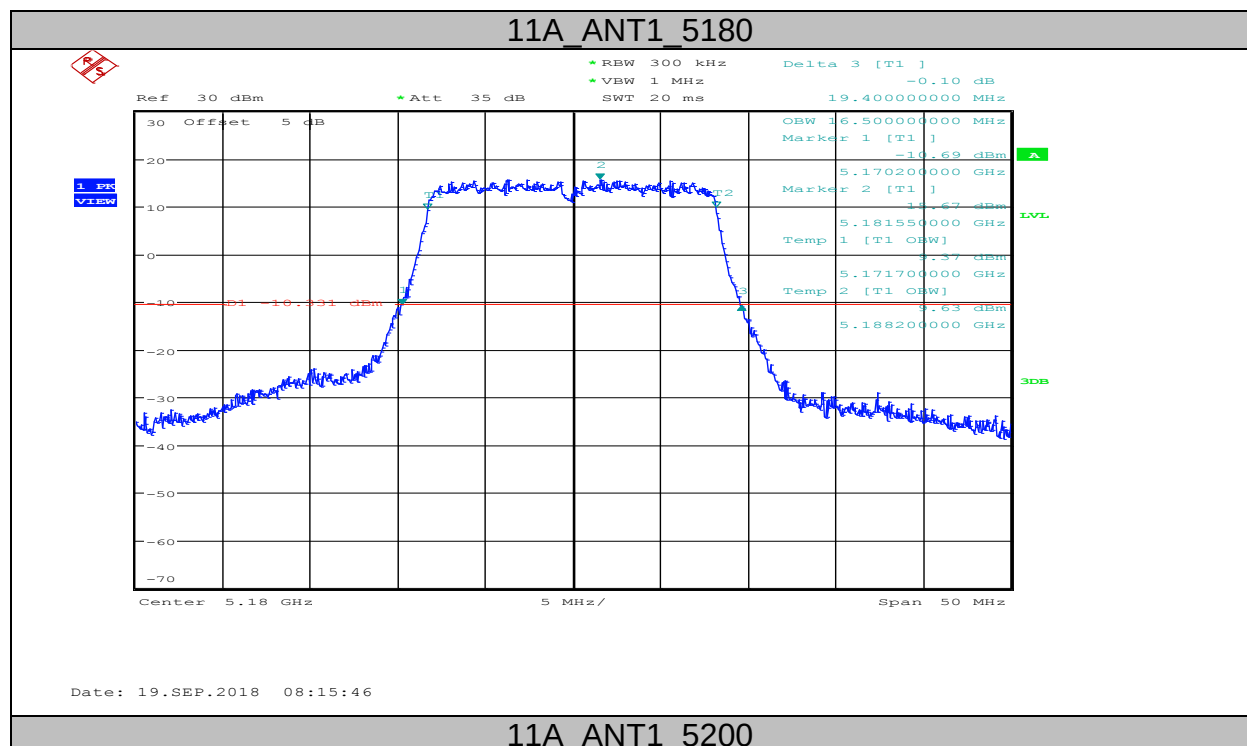
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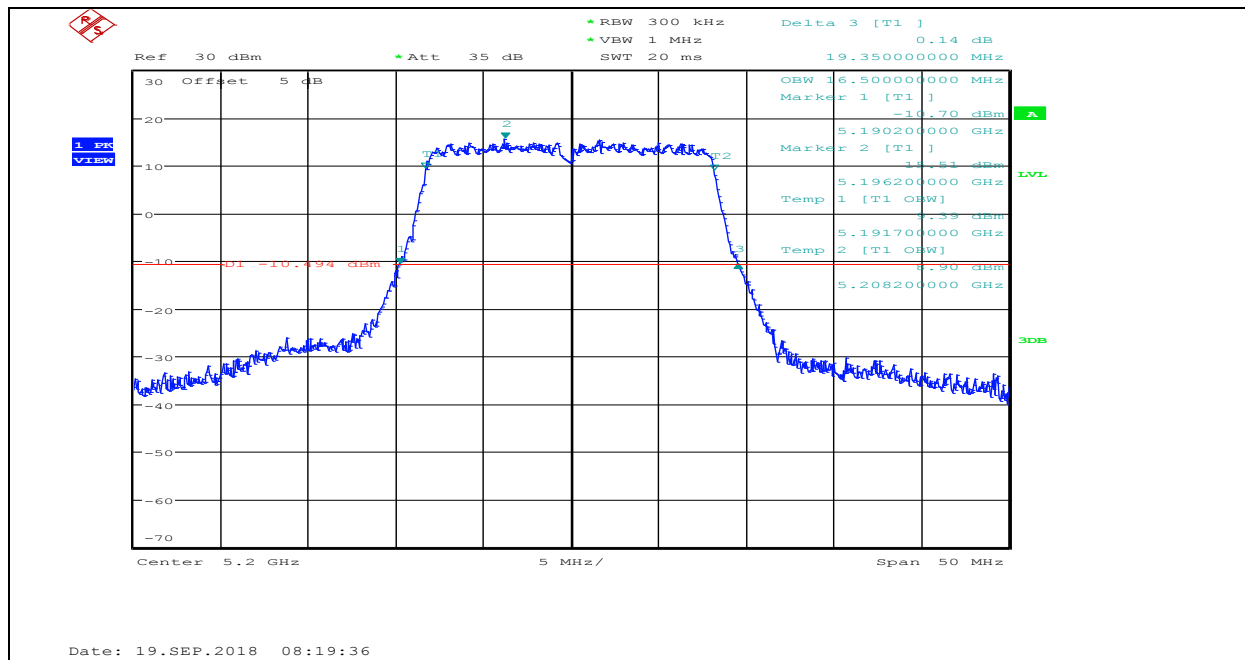
Test Mode	Antenna	Test Channel	EBW[MHz]	Limit [MHz]	Verdict
11A	ANT1	5180	19.40	---	PASS
11A	ANT1	5200	19.30	---	PASS
11A	ANT1	5240	19.35	---	PASS
11N20MIMO	ANT1	5180	20.05	---	PASS
11N20MIMO	ANT2	5180	20.30	---	PASS
11N20MIMO	ANT1	5200	20.35	---	PASS
11N20MIMO	ANT2	5200	20.20	---	PASS
11N20MIMO	ANT1	5240	20.40	---	PASS
11N20MIMO	ANT2	5240	20.15	---	PASS
11N40MIMO	ANT1	5190	40.80	---	PASS
11N40MIMO	ANT2	5190	40.60	---	PASS
11N40MIMO	ANT1	5230	41.00	---	PASS
11N40MIMO	ANT2	5230	40.40	---	PASS
11AC20MIMO	ANT1	5180	23.45	---	PASS
11AC20MIMO	ANT2	5180	23.65	---	PASS
11AC20MIMO	ANT1	5200	23.75	---	PASS
11AC20MIMO	ANT2	5200	23.30	---	PASS
11AC20MIMO	ANT1	5240	23.40	---	PASS
11AC20MIMO	ANT2	5240	23.90	---	PASS
11AC40MIMO	ANT1	5190	46.50	---	PASS
11AC40MIMO	ANT2	5190	47.10	---	PASS
11AC40MIMO	ANT1	5230	46.50	---	PASS
11AC40MIMO	ANT2	5230	46.80	---	PASS
11AC80MIMO	ANT1	5210	95.00	---	PASS
11AC80MIMO	ANT2	5210	92.60	---	PASS

Test Mode	Antenna	Test Channel	EBW[MHz]	Limit [MHz]	Verdict
11A	ANT1	5745	16.50	0.5	PASS
11A	ANT1	5785	16.50	0.5	PASS
11A	ANT1	5825	16.40	0.5	PASS
11N20MIMO	ANT1	5745	17.70	0.5	PASS
11N20MIMO	ANT2	5745	17.70	0.5	PASS
11N20MIMO	ANT1	5785	17.65	0.5	PASS
11N20MIMO	ANT2	5785	17.65	0.5	PASS
11N20MIMO	ANT1	5825	17.70	0.5	PASS
11N20MIMO	ANT2	5825	17.70	0.5	PASS

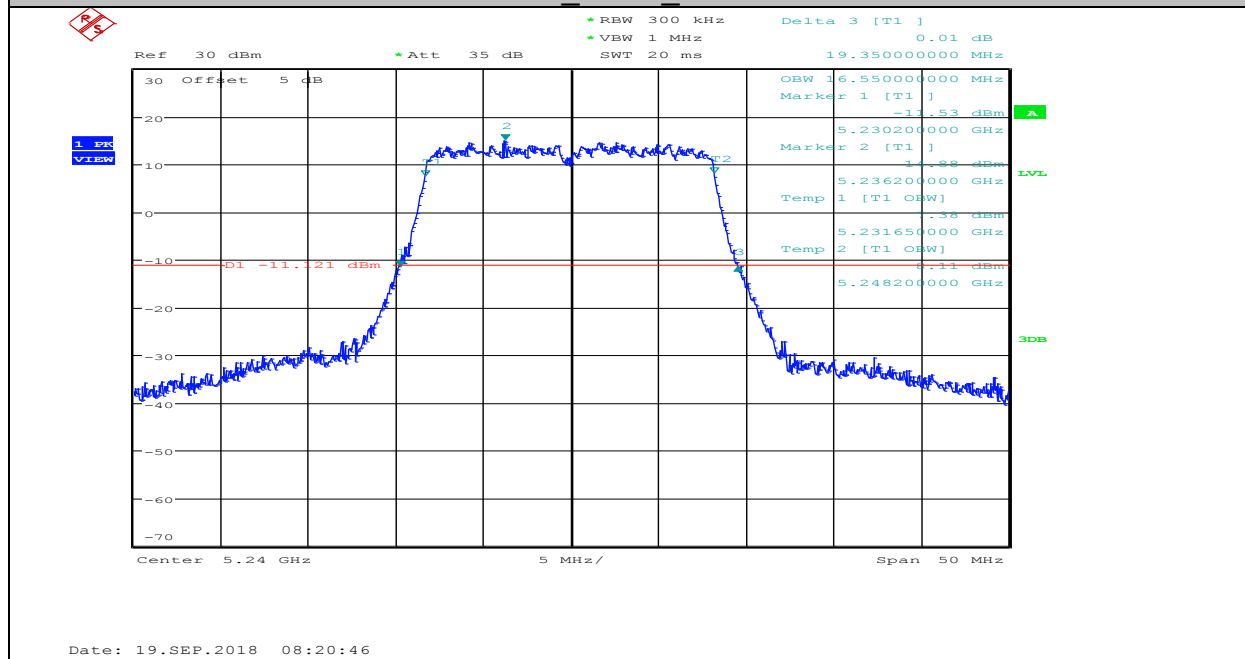
11N40MIMO	ANT1	5755	35.30	0.5	PASS
11N40MIMO	ANT2	5755	35.60	0.5	PASS
11N40MIMO	ANT1	5795	35.60	0.5	PASS
11N40MIMO	ANT2	5795	35.50	0.5	PASS
11AC20MIMO	ANT1	5745	17.75	0.5	PASS
11AC20MIMO	ANT2	5745	17.75	0.5	PASS
11AC20MIMO	ANT1	5785	17.80	0.5	PASS
11AC20MIMO	ANT2	5785	17.75	0.5	PASS
11AC20MIMO	ANT1	5825	17.85	0.5	PASS
11AC20MIMO	ANT2	5825	17.80	0.5	PASS
11AC40MIMO	ANT1	5755	36.60	0.5	PASS
11AC40MIMO	ANT2	5755	36.70	0.5	PASS
11AC40MIMO	ANT1	5795	36.60	0.5	PASS
11AC40MIMO	ANT2	5795	36.60	0.5	PASS
11AC80MIMO	ANT1	5775	76.80	0.5	PASS
11AC80MIMO	ANT2	5775	73.80	0.5	PASS

4.5. Original test data

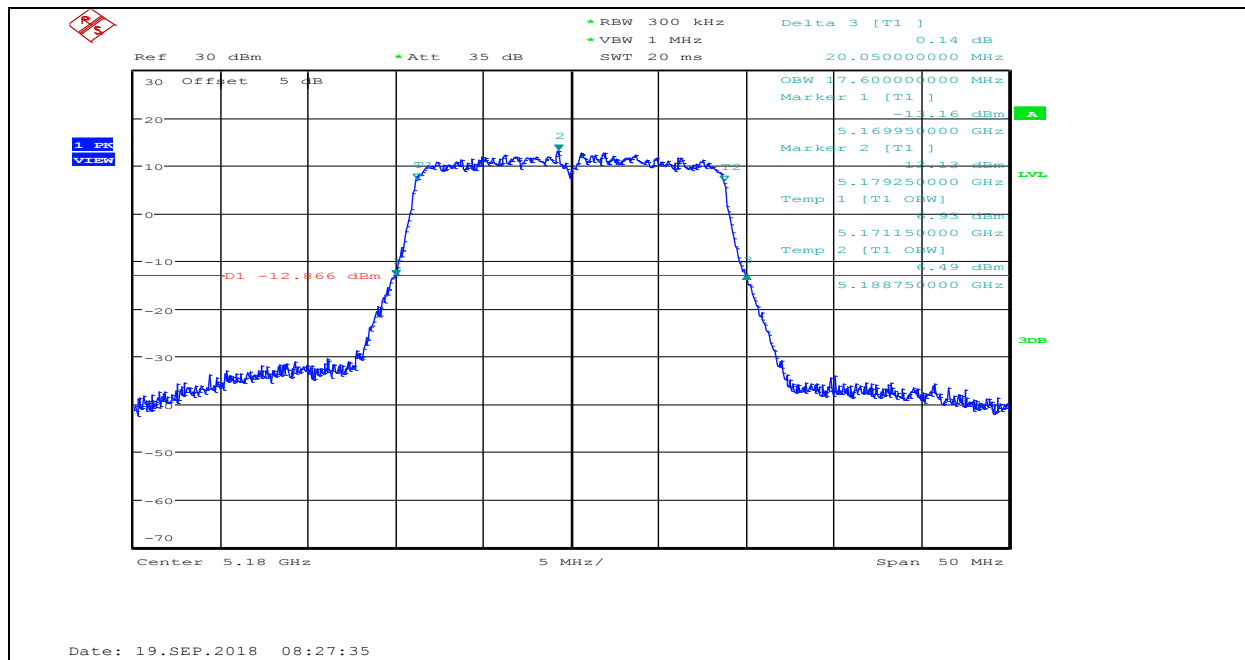




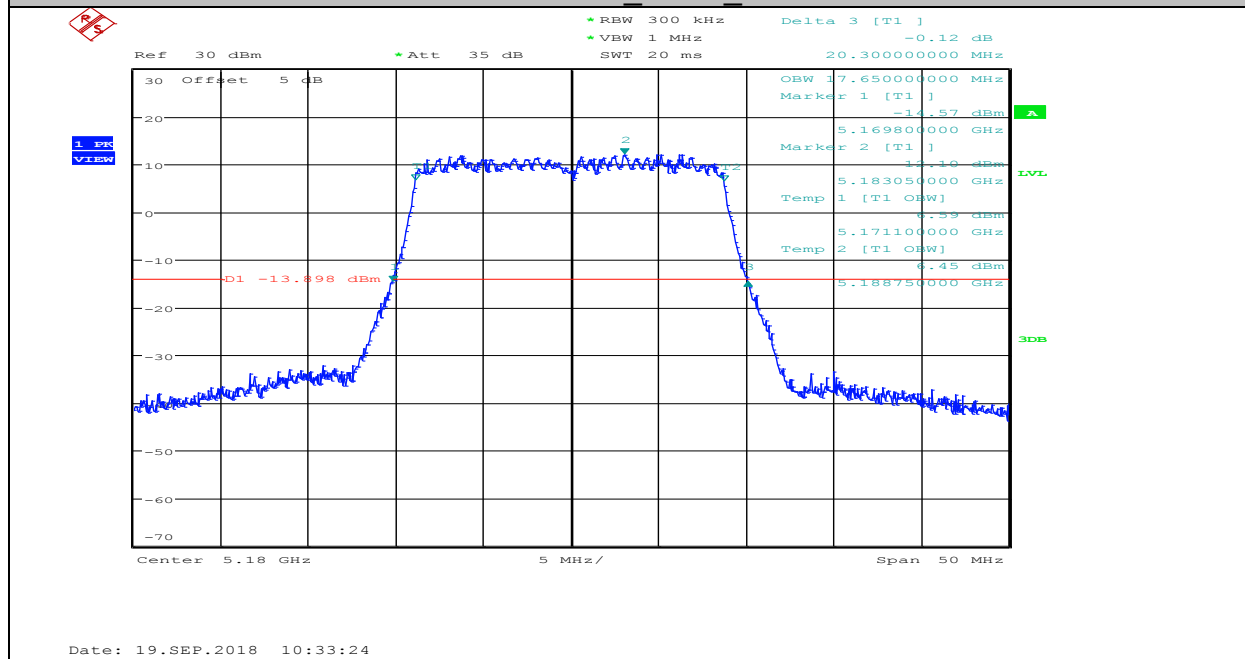
11A ANT1 5240



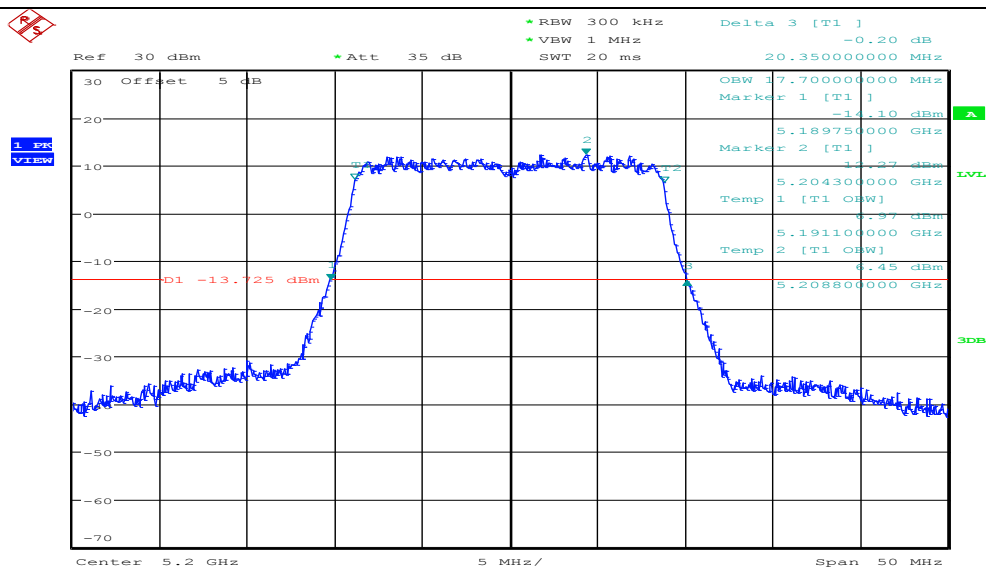
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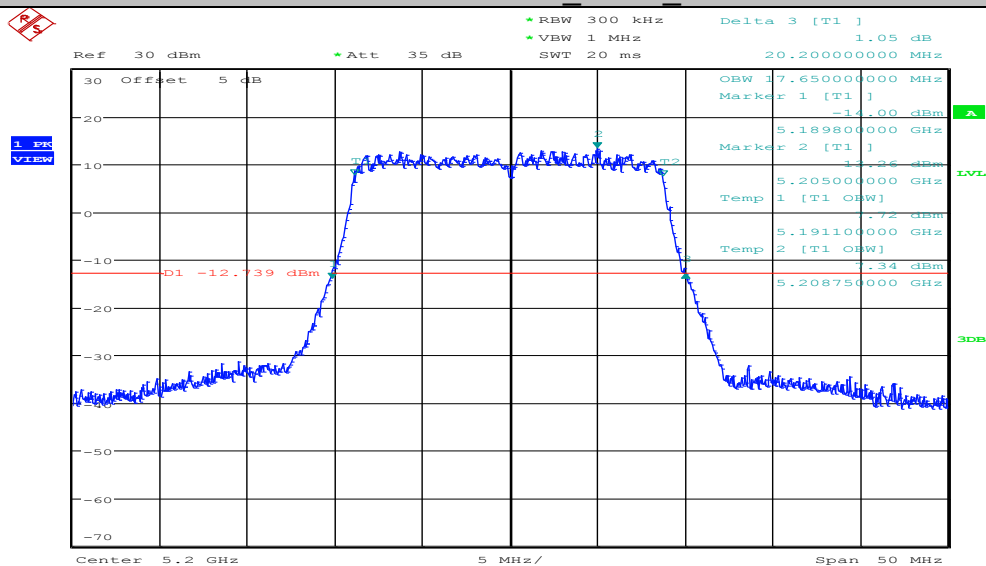


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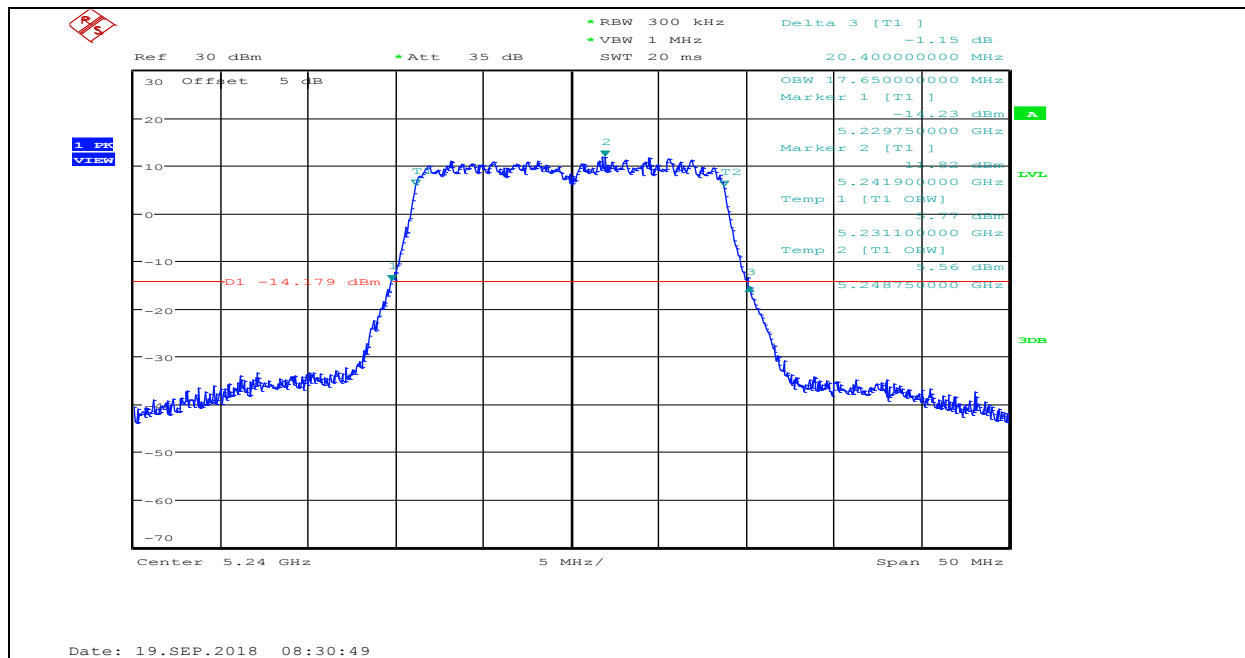
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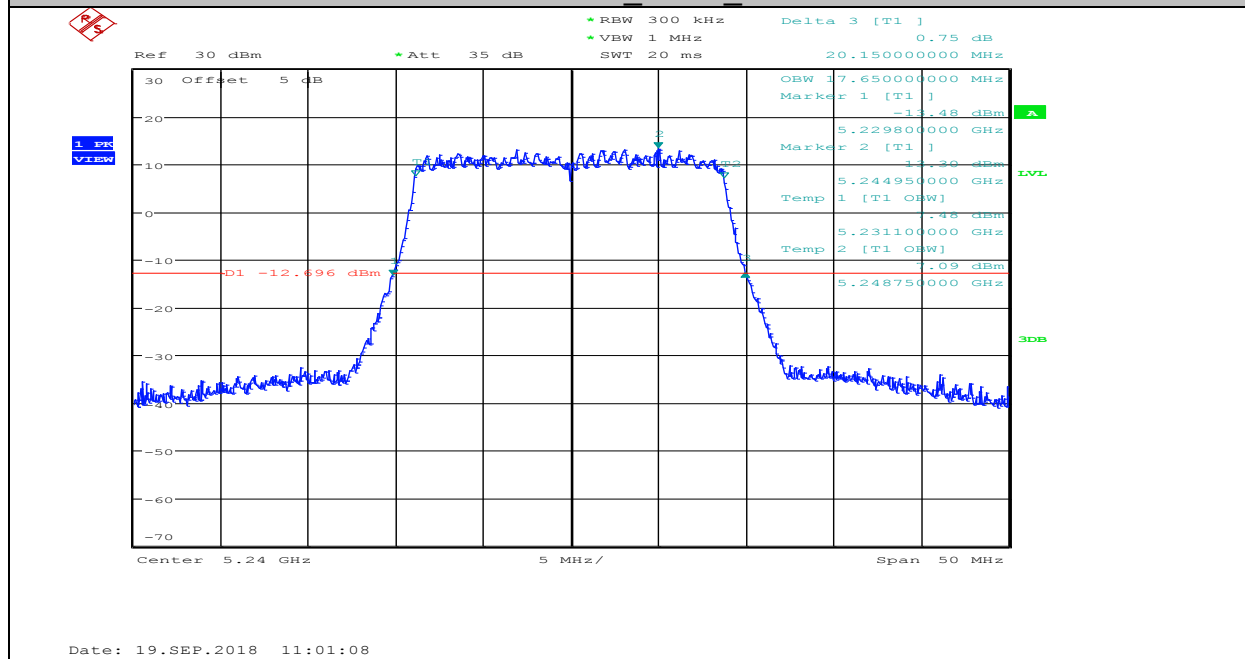


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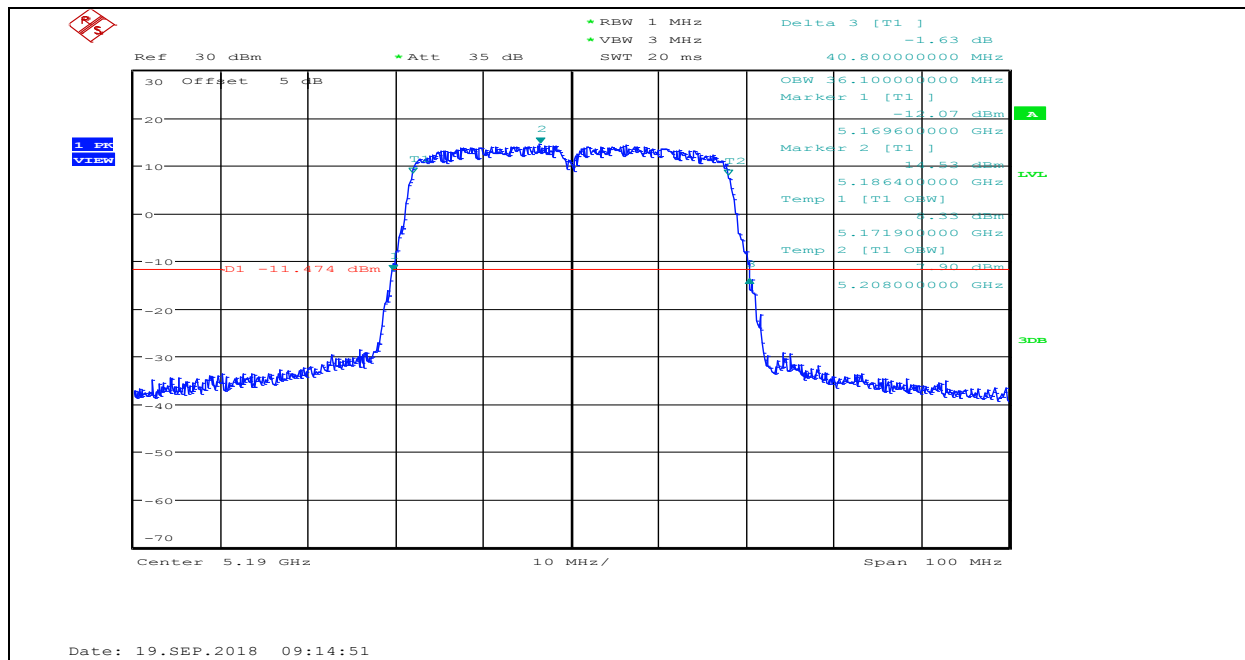
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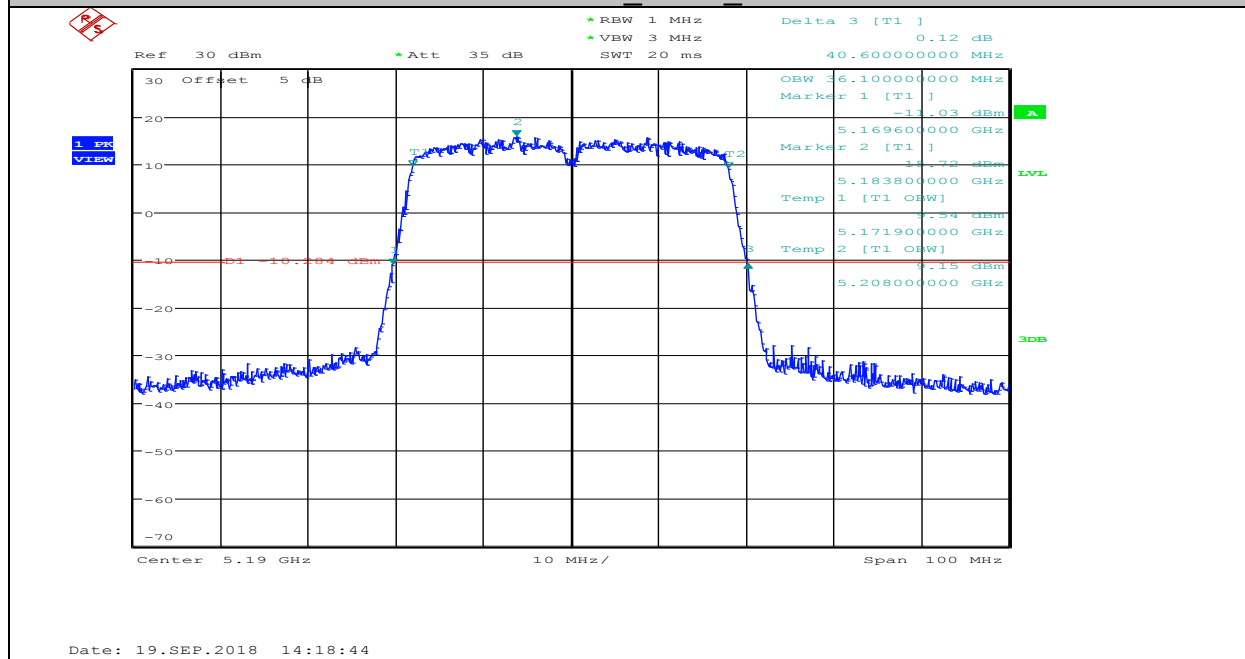
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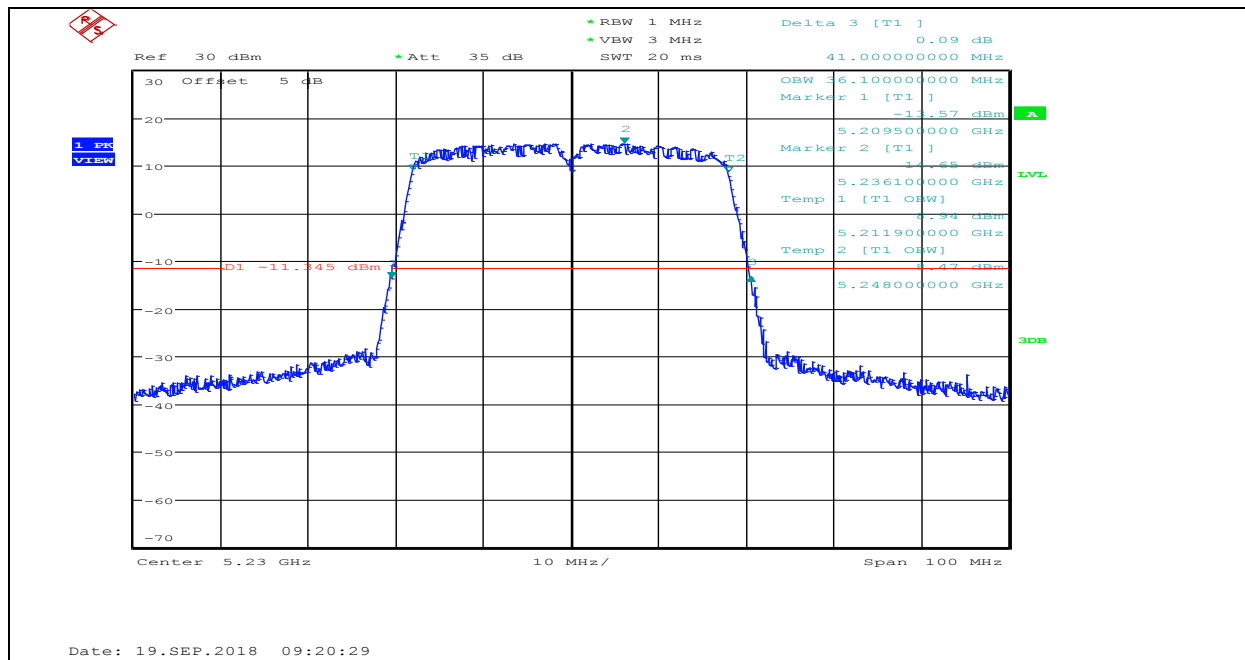
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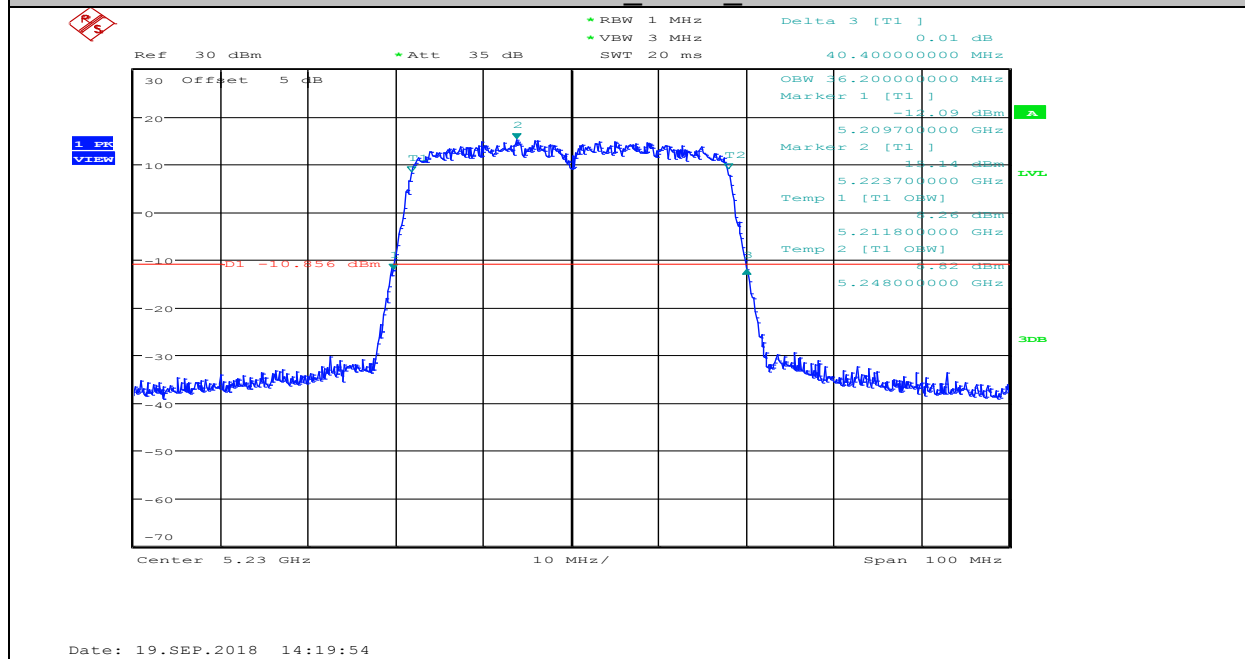
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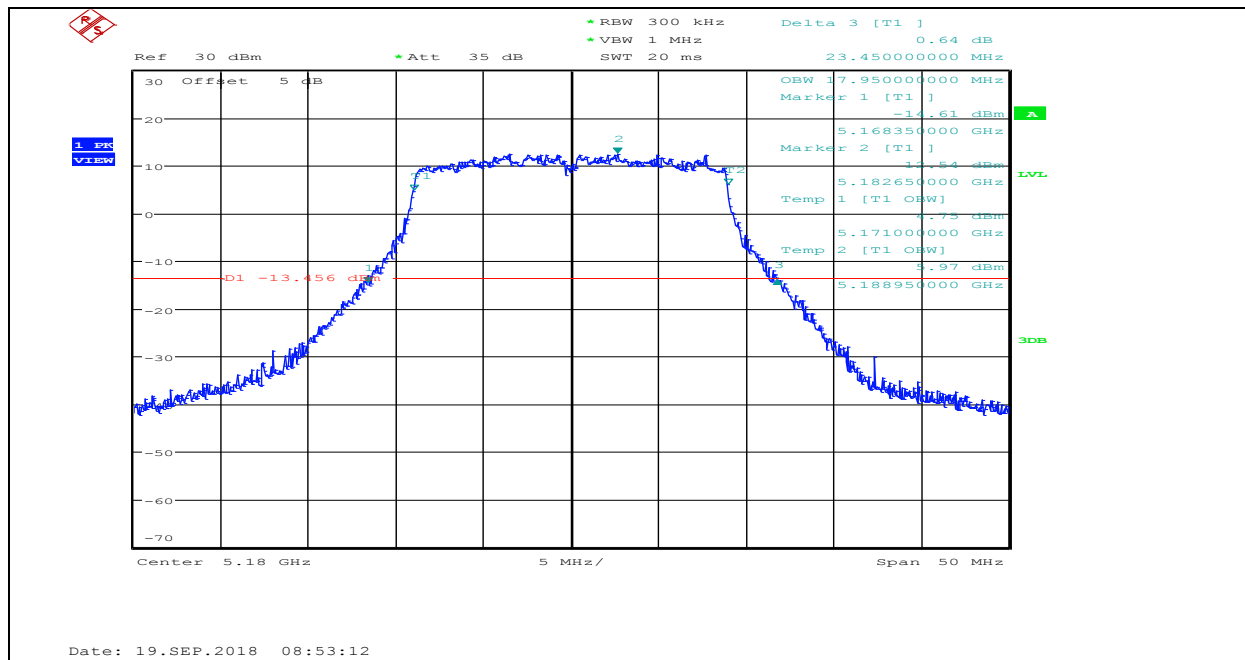
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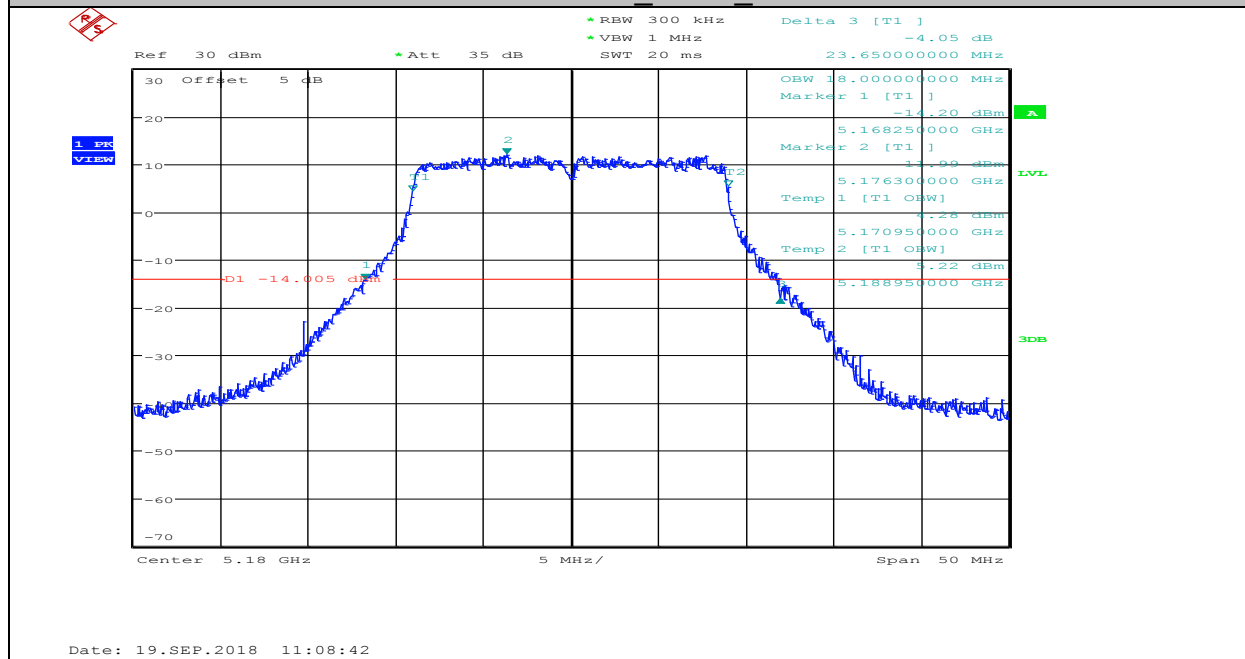
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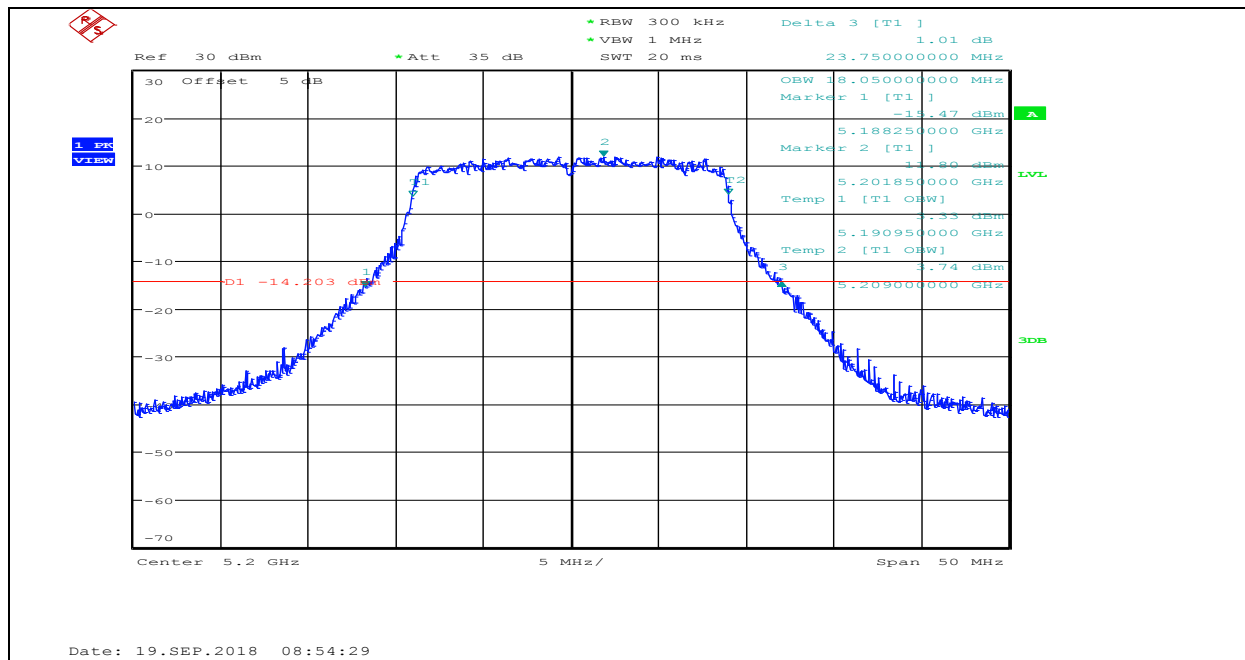
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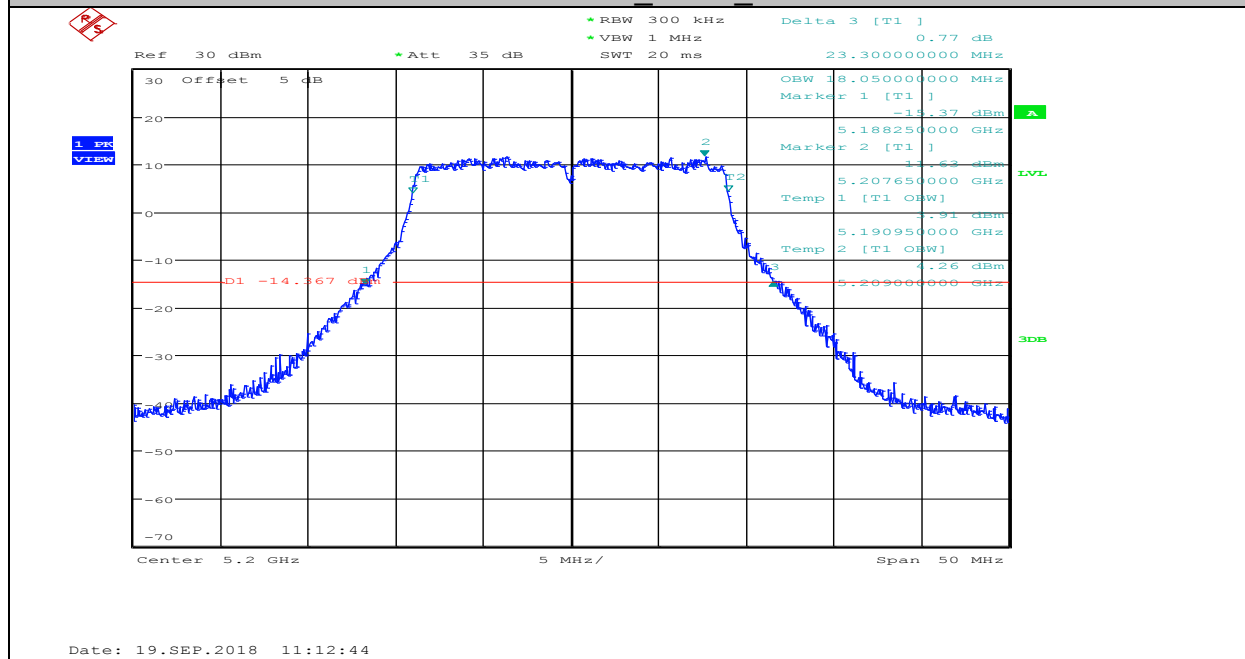
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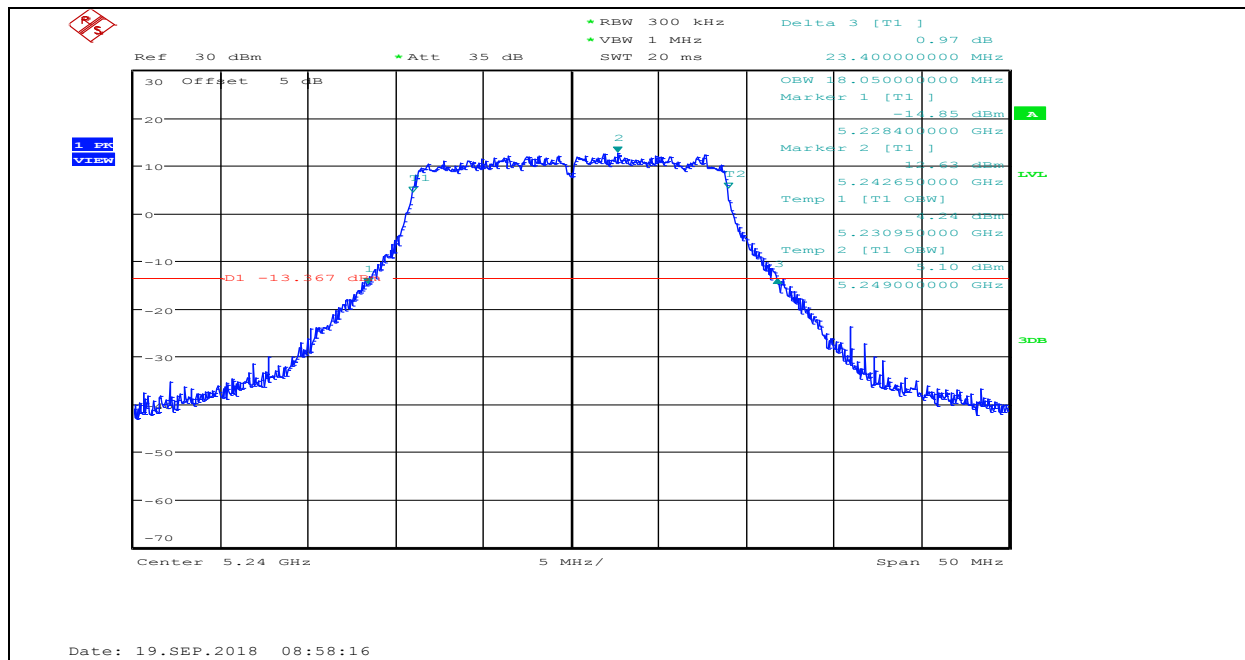
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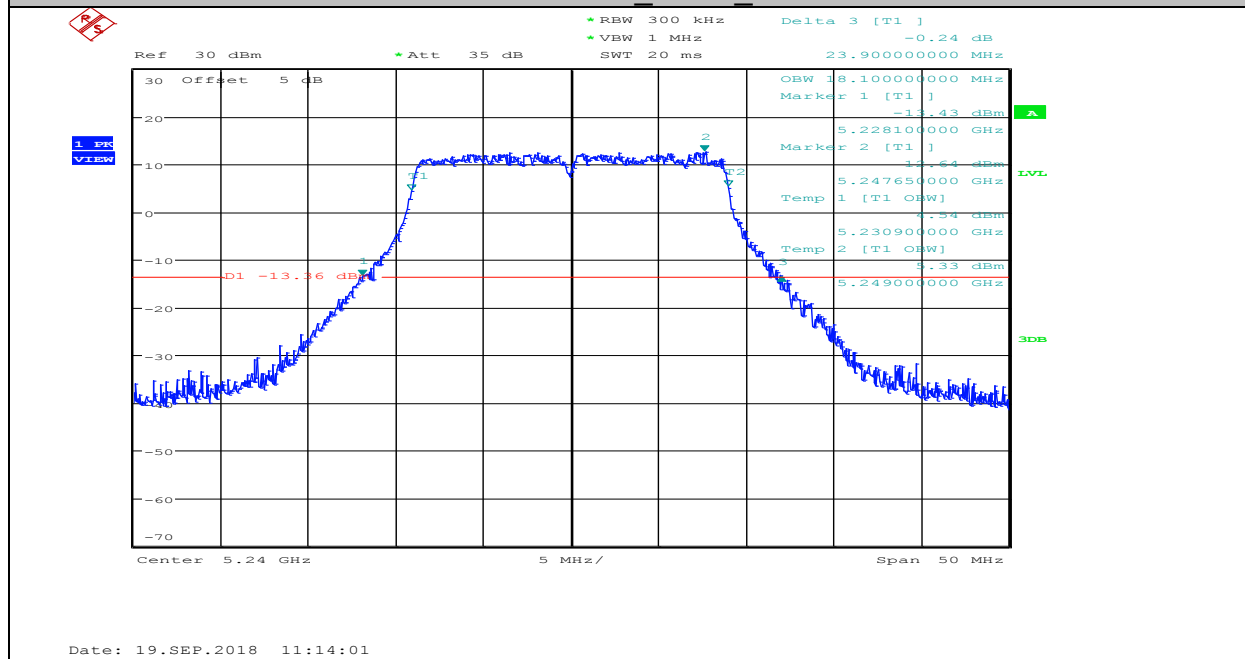
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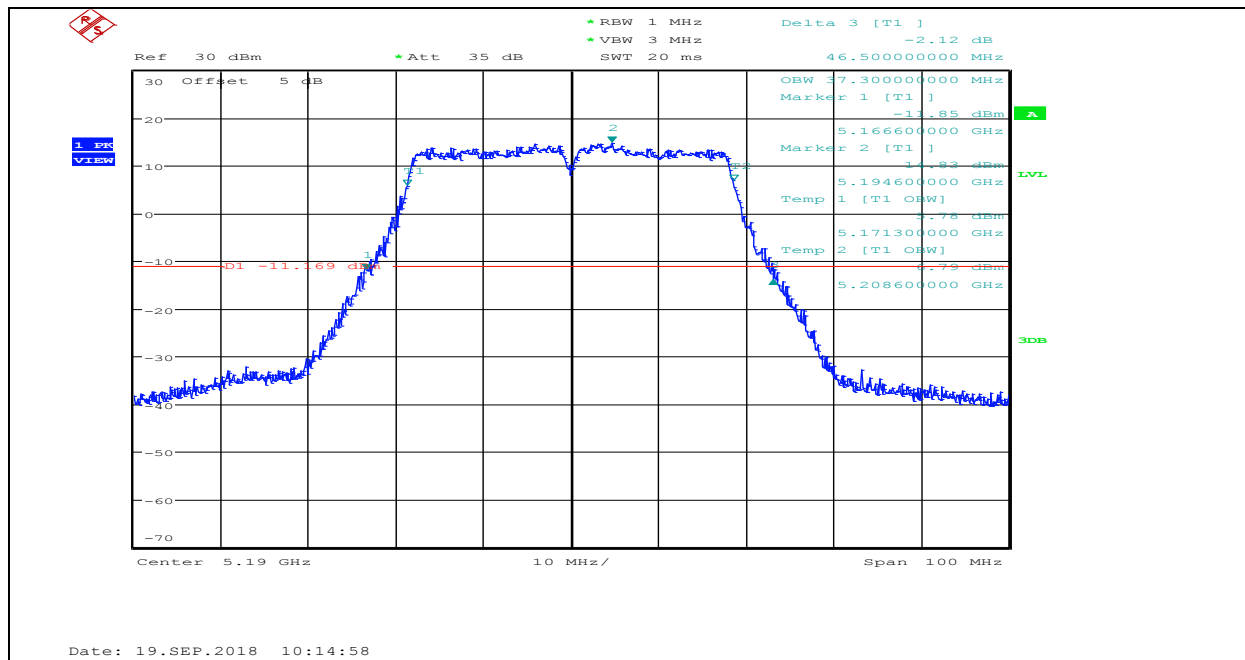
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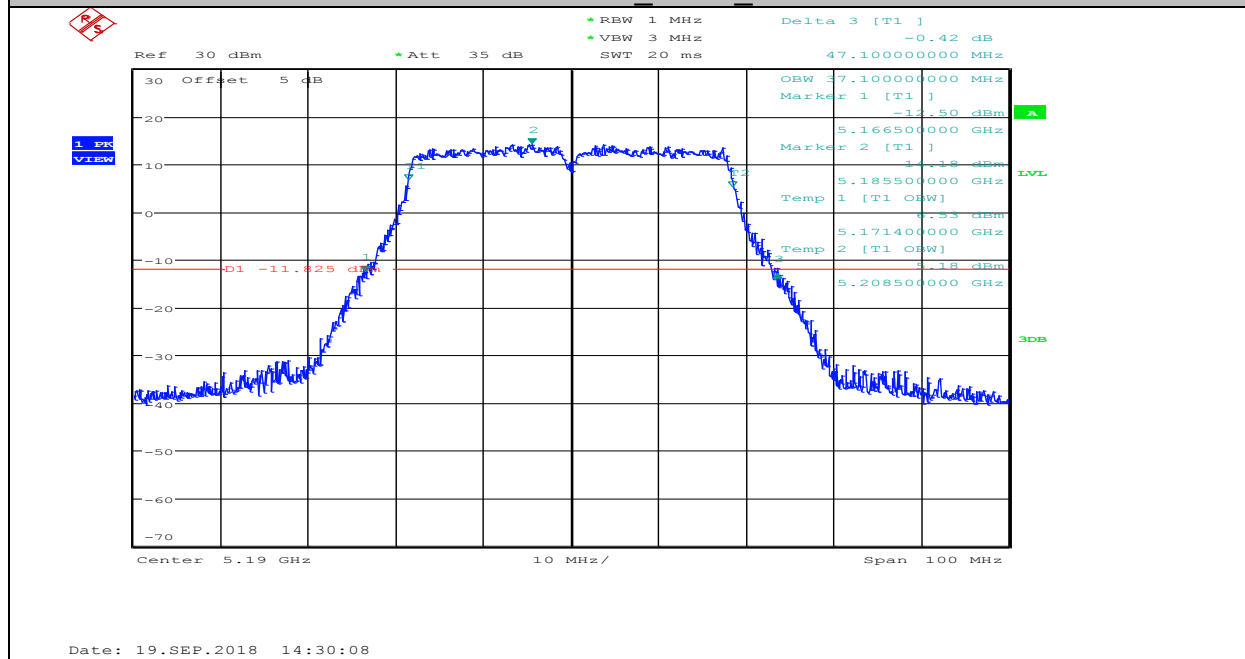
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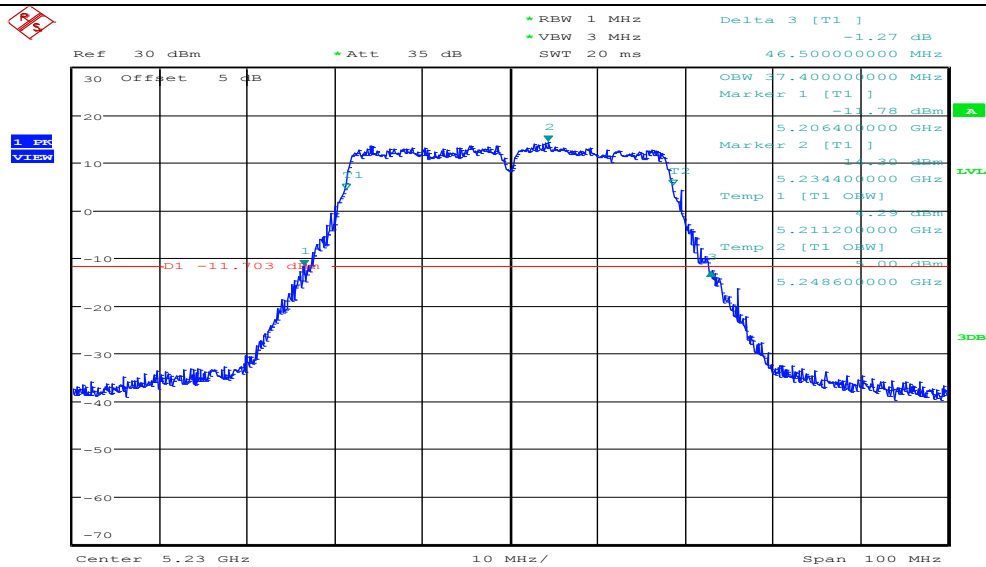
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11AC40MIMO_ANT2_5190

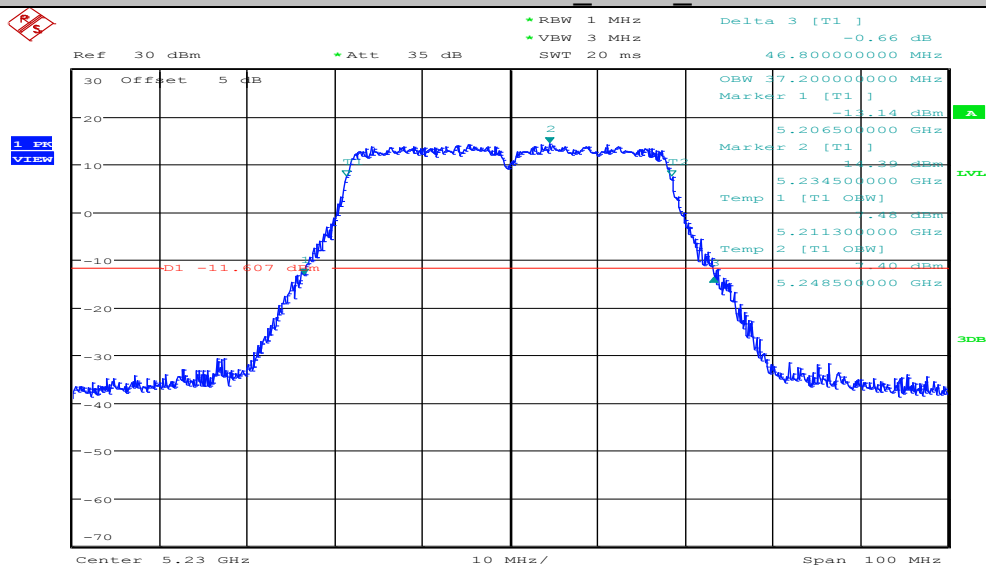


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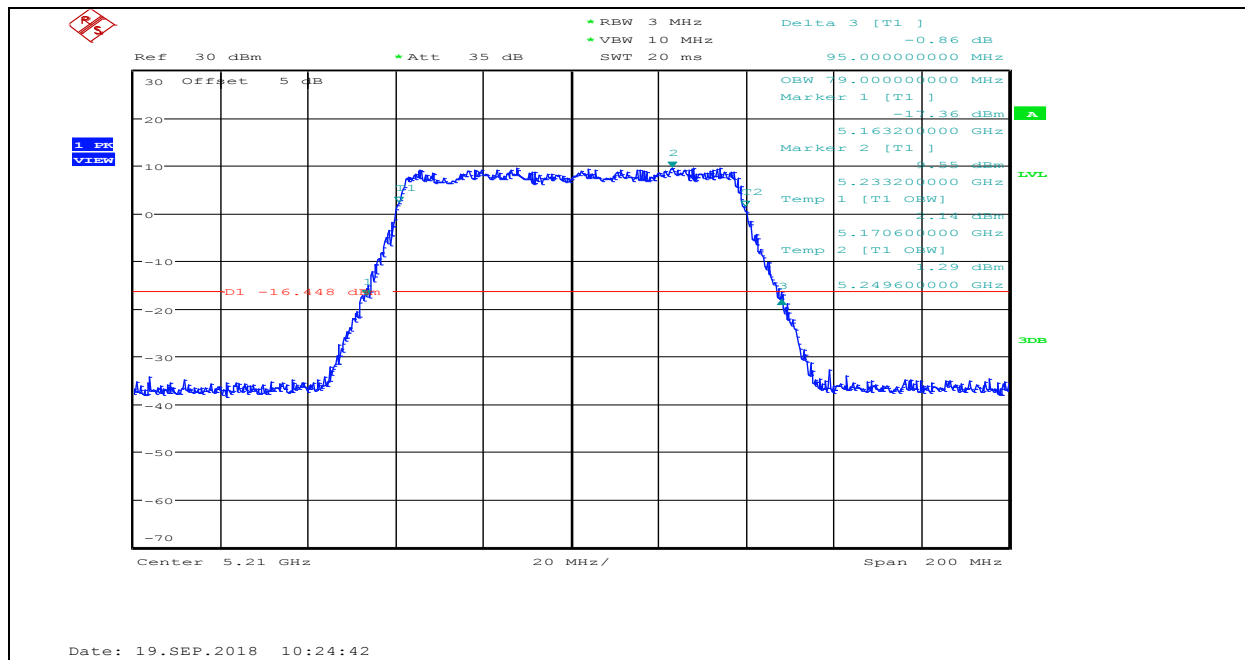
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11AC40MIMO_ANT2_5230

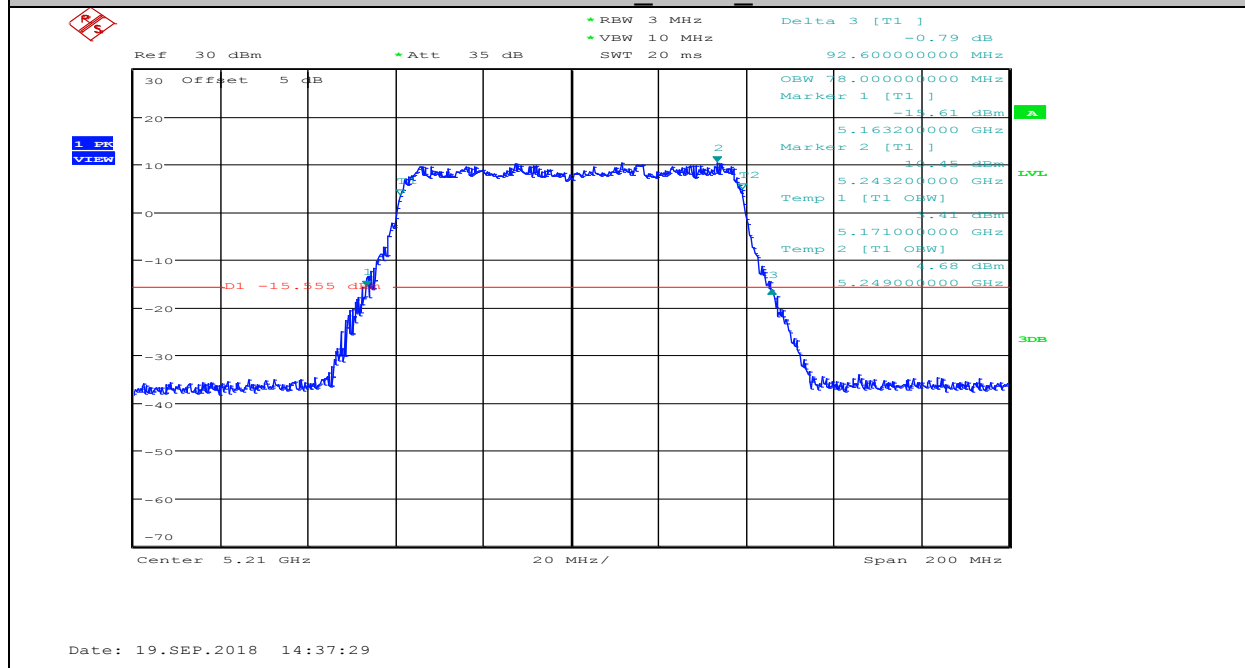


Date: 19.SEP.2018 14:31:53

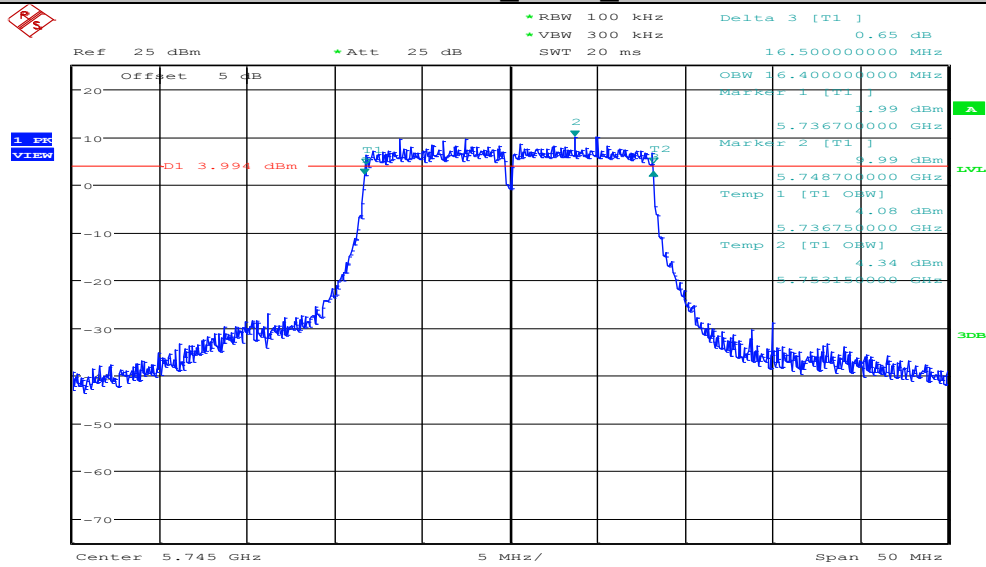
11AC80MIMO_ANT1_5210



11AC80MIMO ANT2 5210

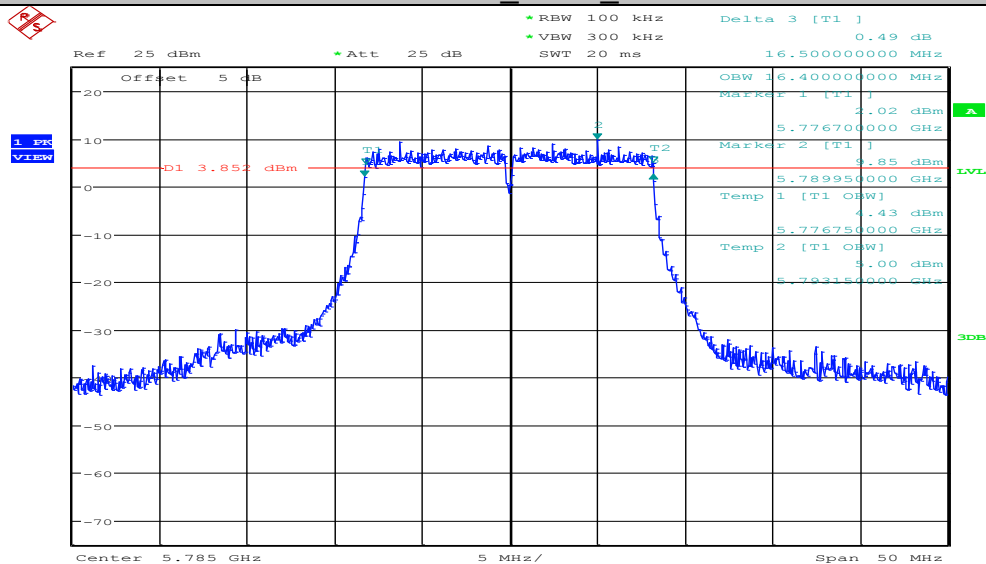


11A ANT1 5745



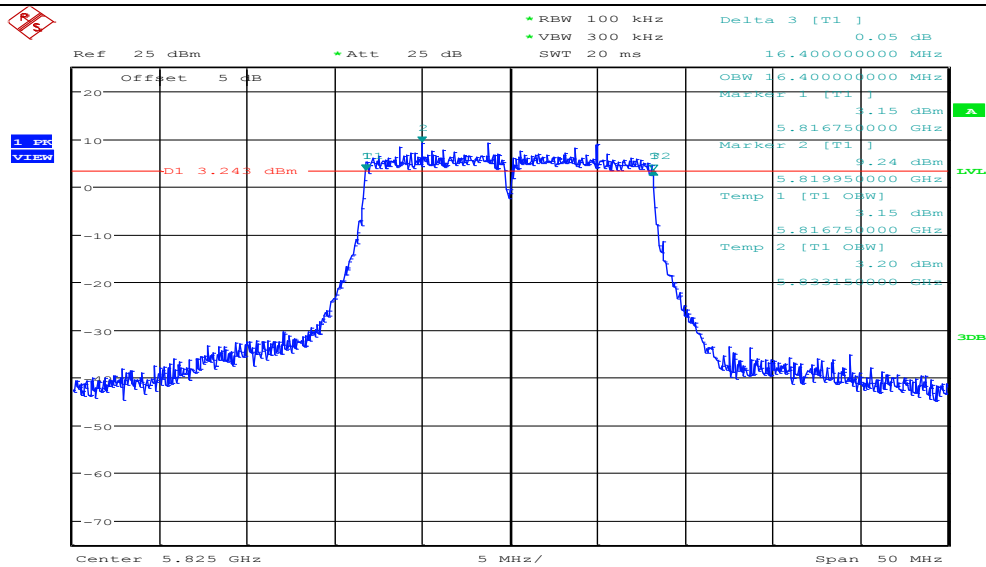
Date: 19.SEP.2018 08:21:56

11A ANT1 5785



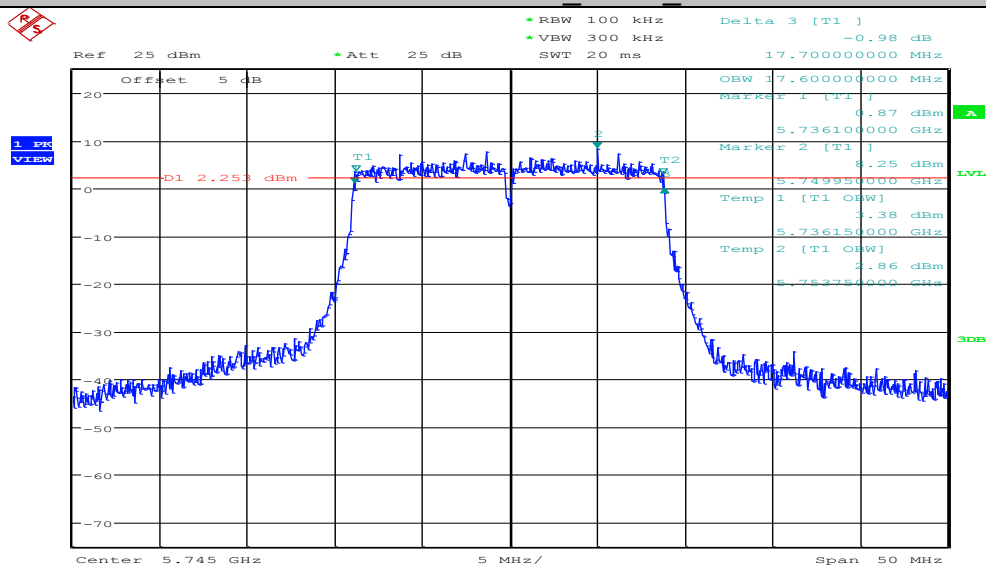
Date: 19.SEP.2018 08:23:06

11A ANT1 5825



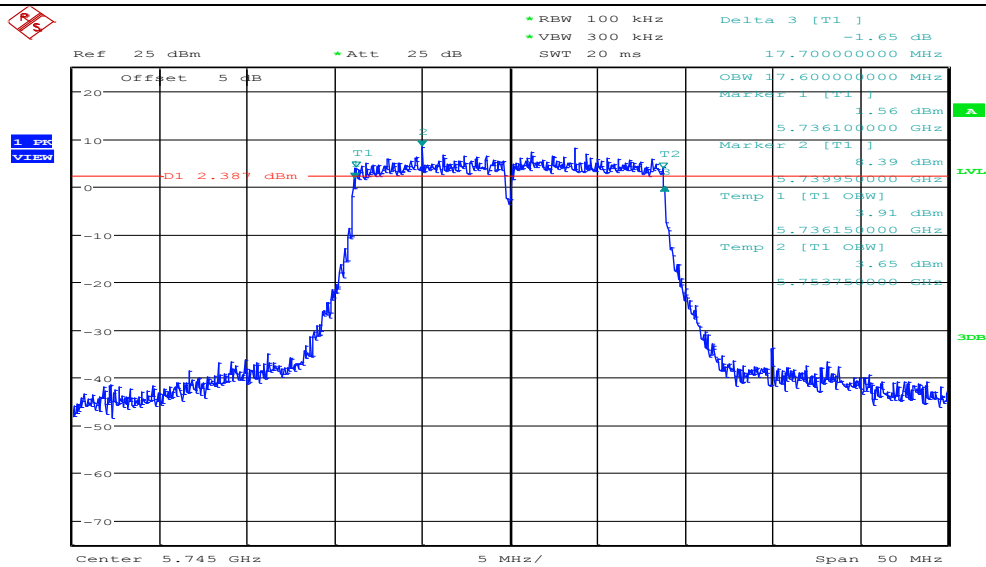
Date: 19.SEP.2018 08:24:11

11N20MIMO_ANT1_5745



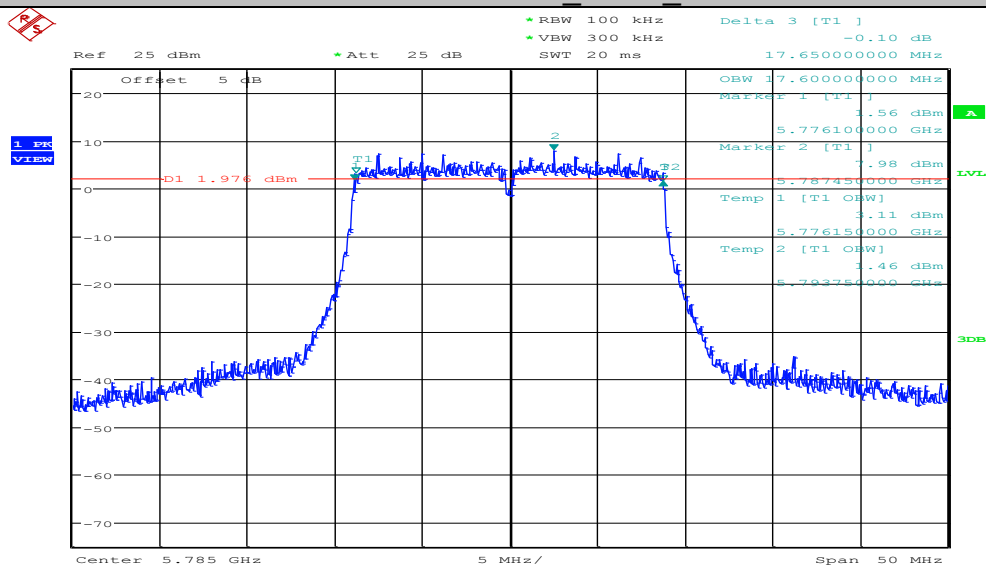
Date: 19.SEP.2018 08:35:23

11N20MIMO ANT2 5745



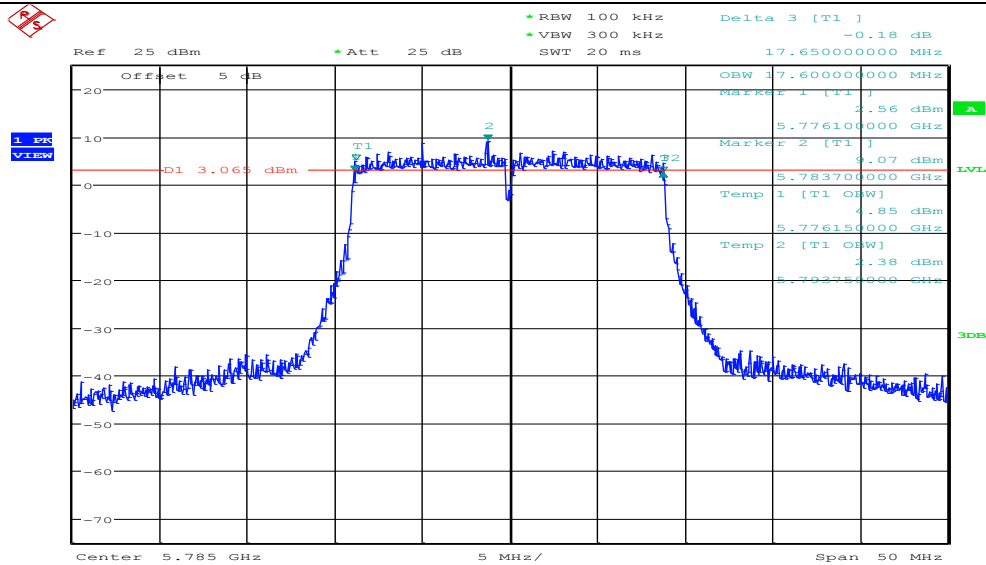
Date: 19.SEP.2018 11:02:14

11N20MIMO_ANT1_5785



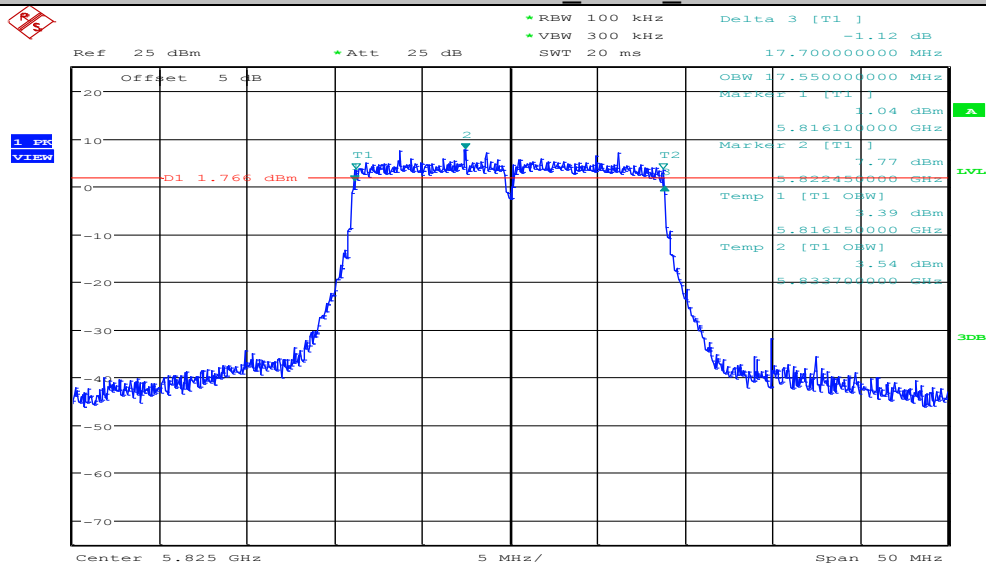
Date: 19.SEP.2018 08:40:11

11N20MIMO_ANT2_5785



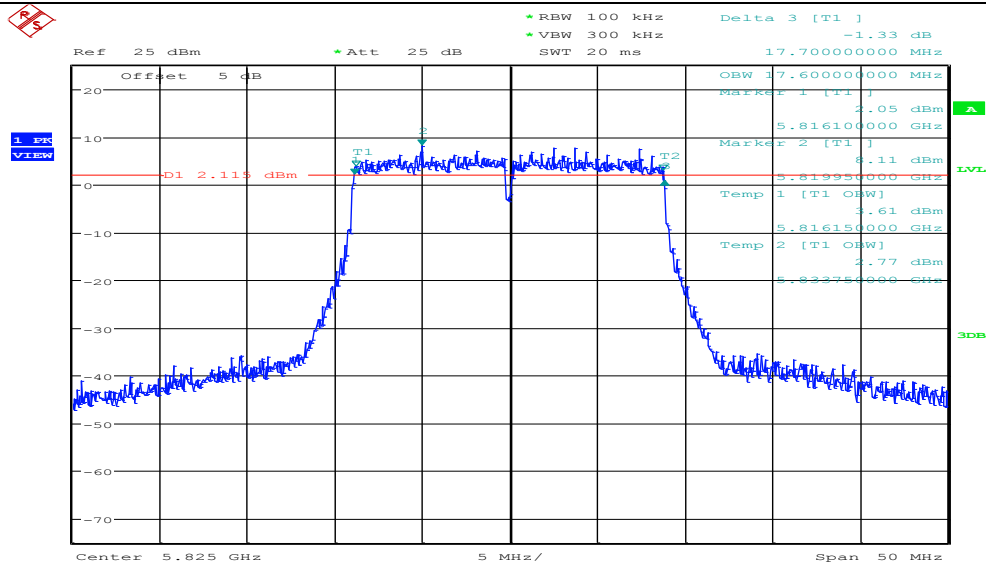
Date: 19.SEP.2018 11:03:24

11N20MIMO_ANT1_5825



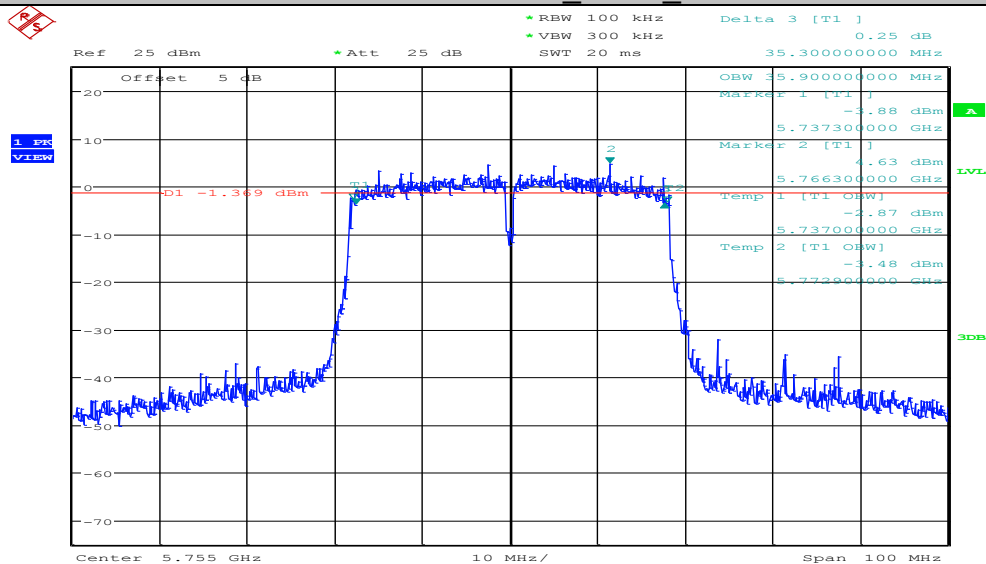
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11N20MIMO_ANT2_5825



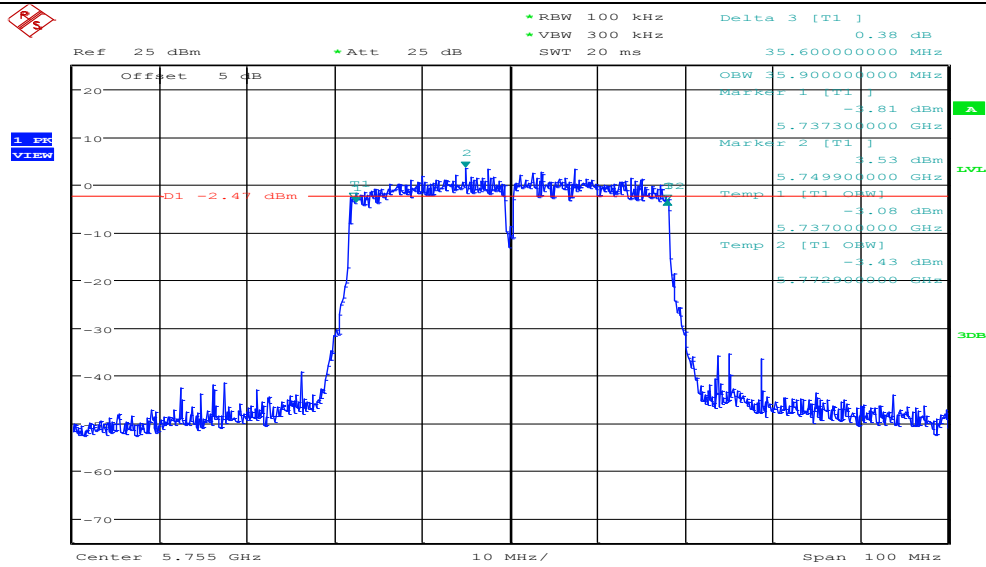
Date: 19.SEP.2018 11:05:21

11N40MIMO_ANT1_5755

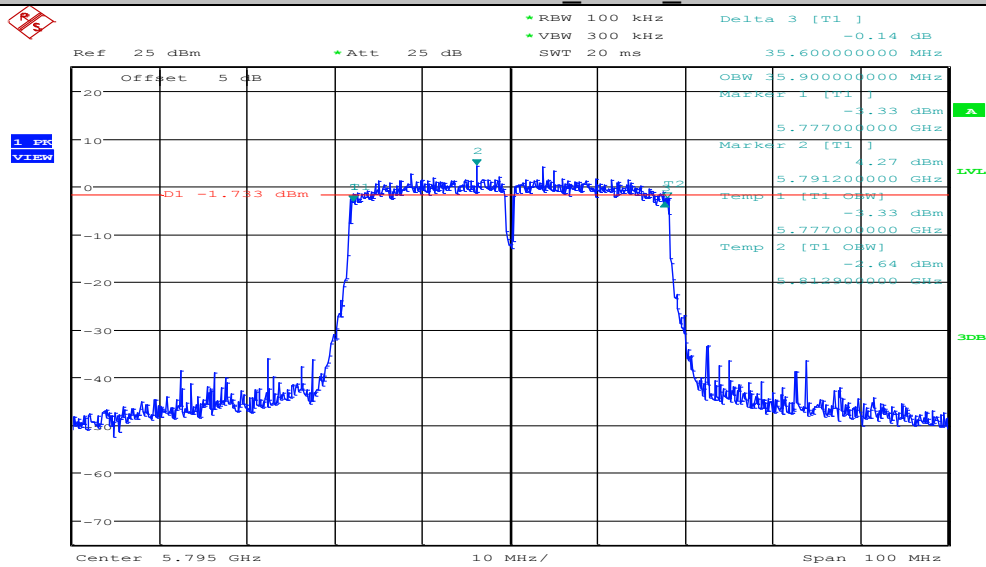


Date: 19.SEP.2018 10:11:43

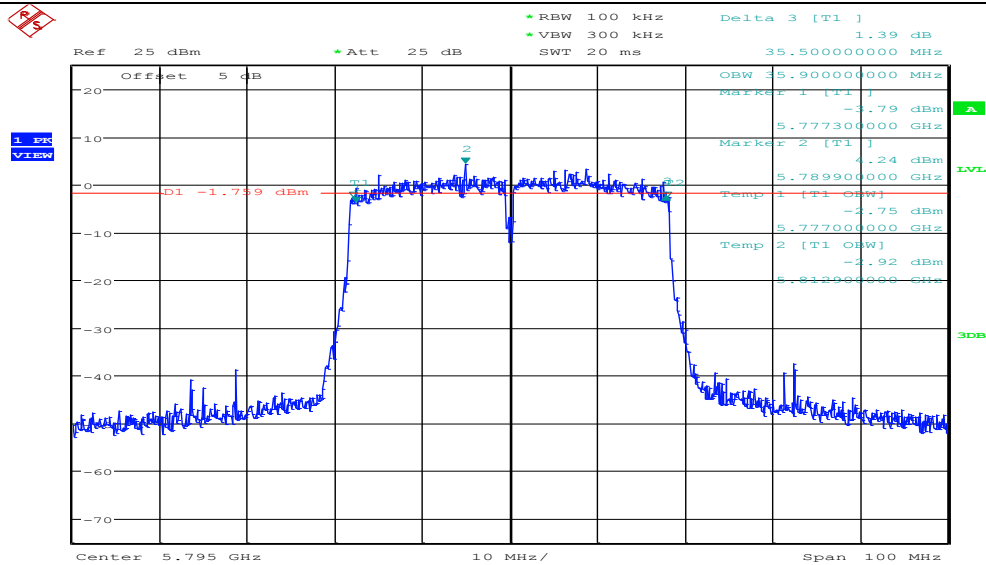
11N40MIMO_ANT2_5755



11N40MIMO_ANT1_5795

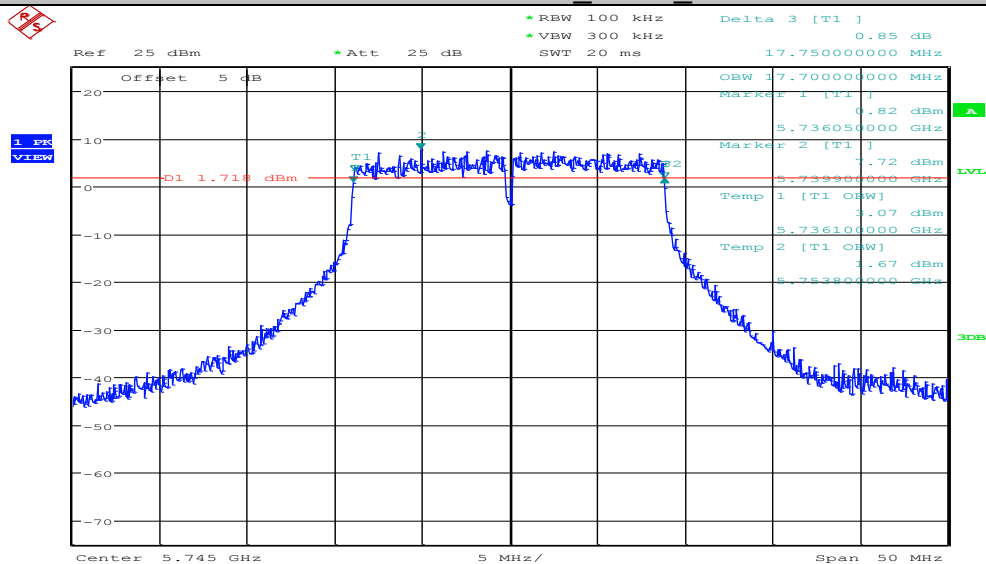


11N40MIMO_ANT2_5795



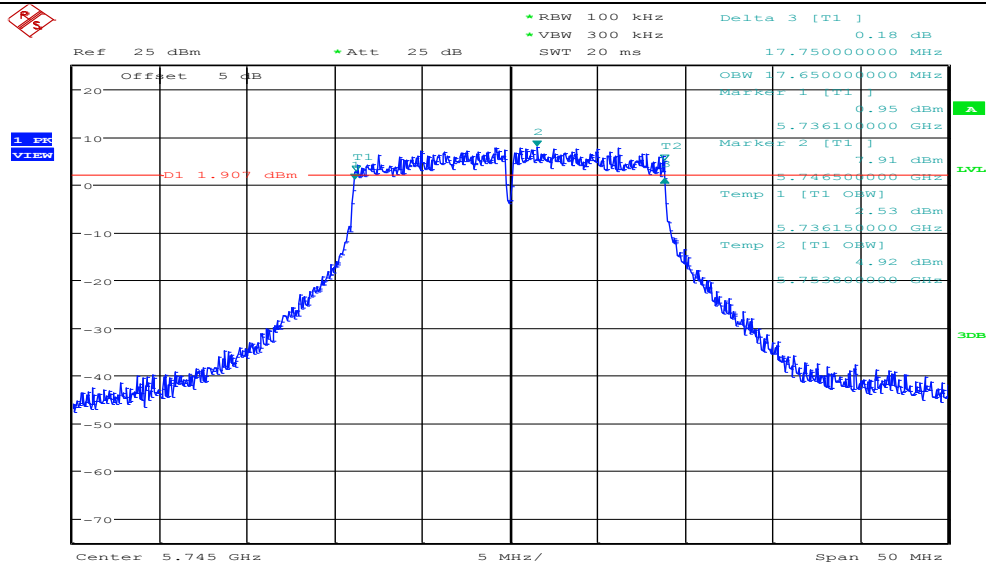
Date: 19.SEP.2018 14:27:26

11AC20MIMO_ANT1_5745



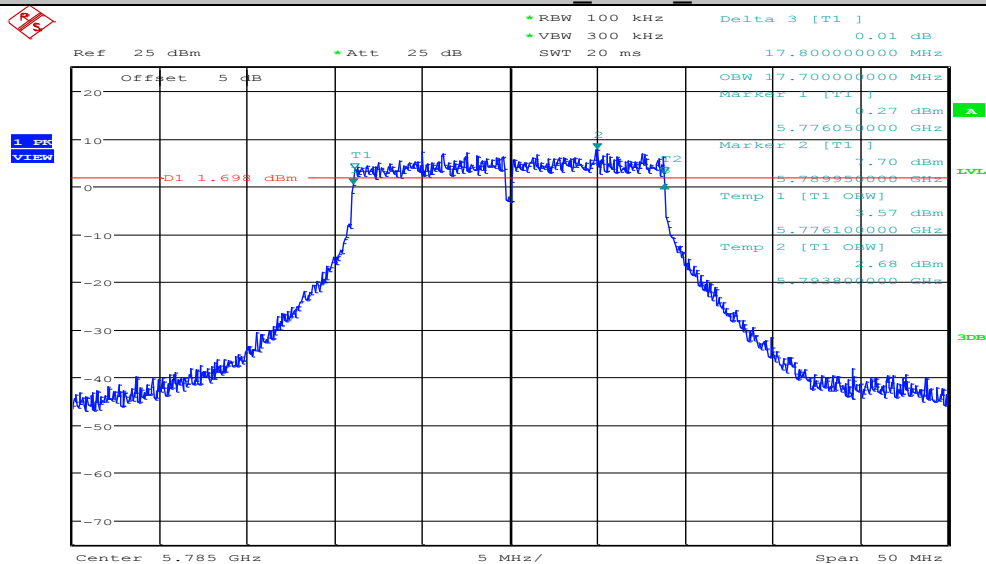
Date: 19.SEP.2018 09:00:19

11AC20MIMO_ANT2_5745



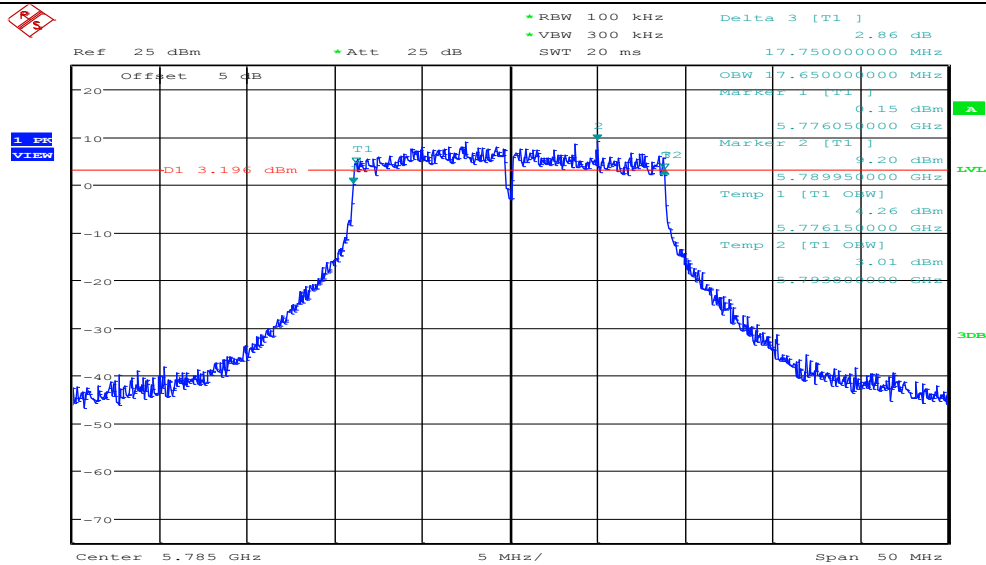
Date: 19.SEP.2018 14:13:37

11AC20MIMO_ANT1_5785



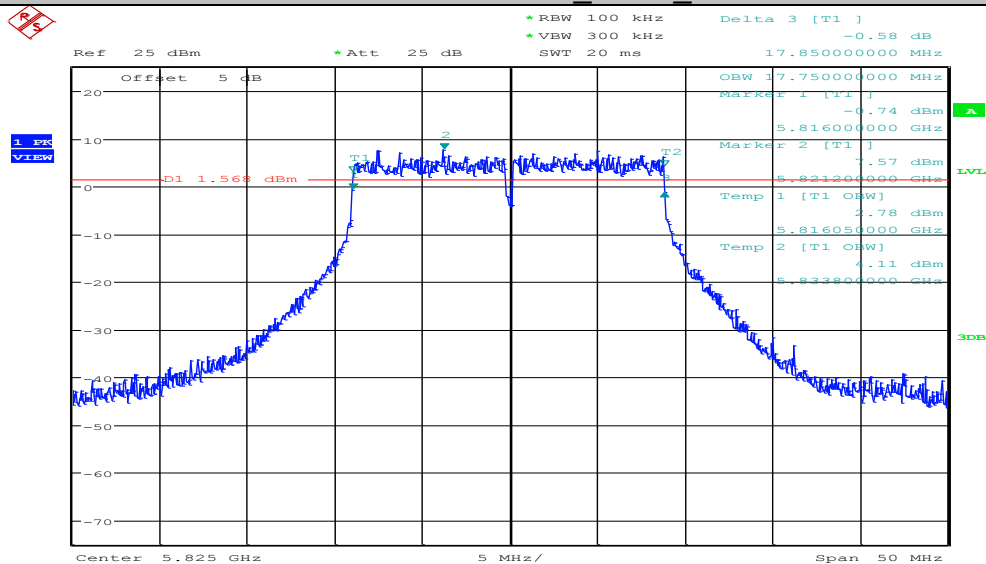
Date: 19.SEP.2018 09:01:35

11AC20MIMO_ANT2_5785



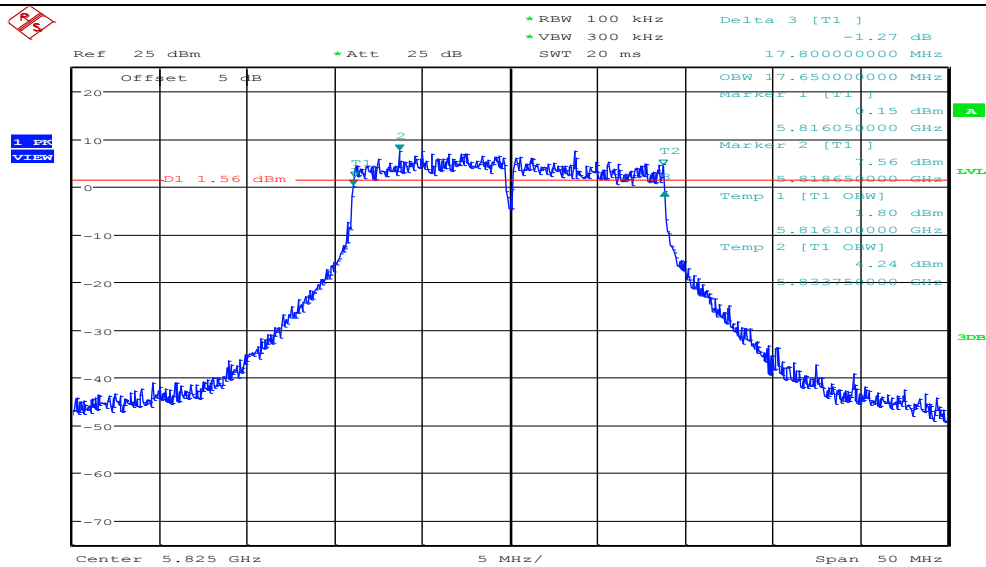
Date: 19.SEP.2018 14:14:42

11AC20MIMO_ANT1_5825



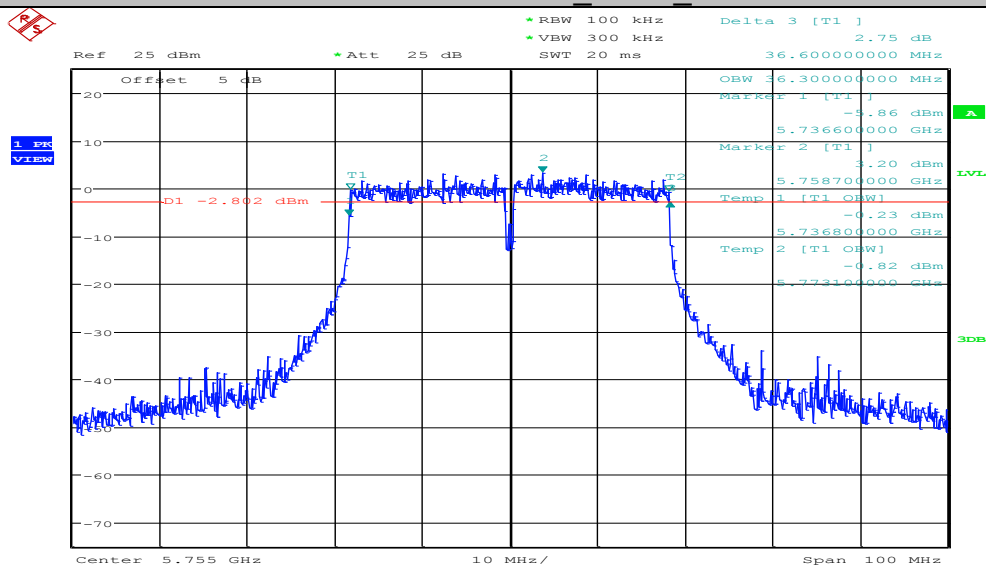
Date: 19.SEP.2018 09:06:22

11AC20MIMO_ANT2_5825



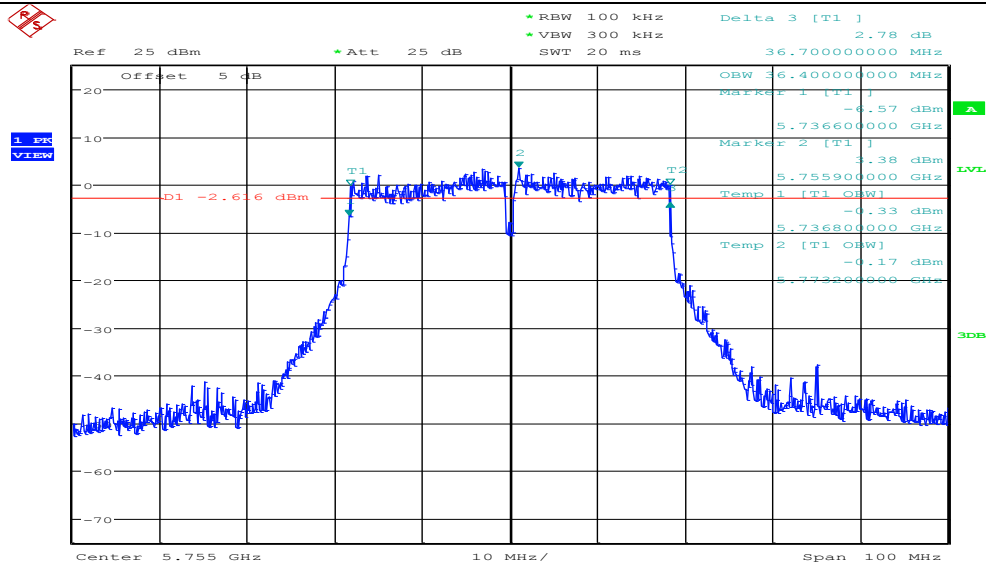
Date: 19.SEP.2018 14:17:12

11AC40MIMO_ANT1_5755



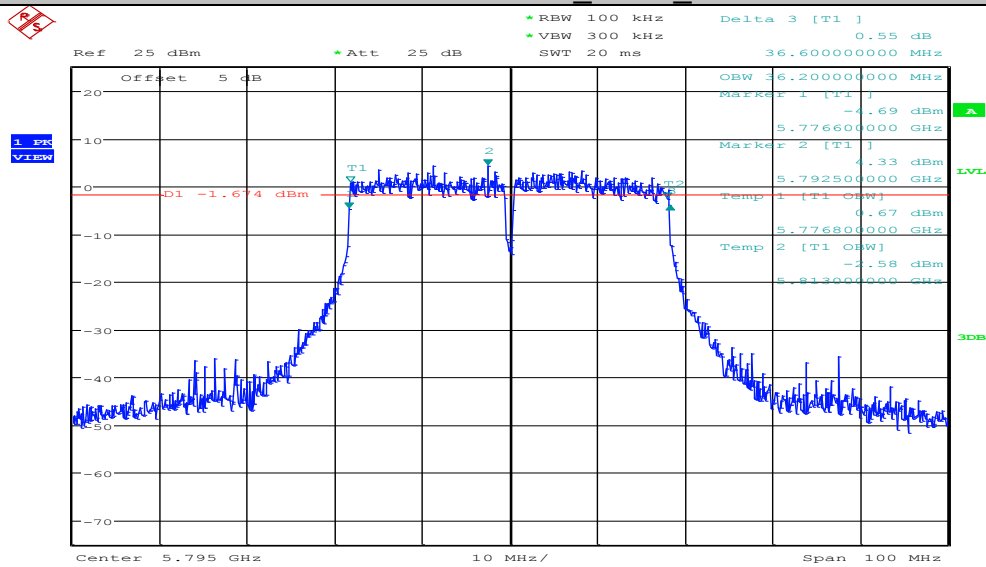
Date: 19.SEP.2018 10:17:50

11AC40MIMO_ANT2_5755



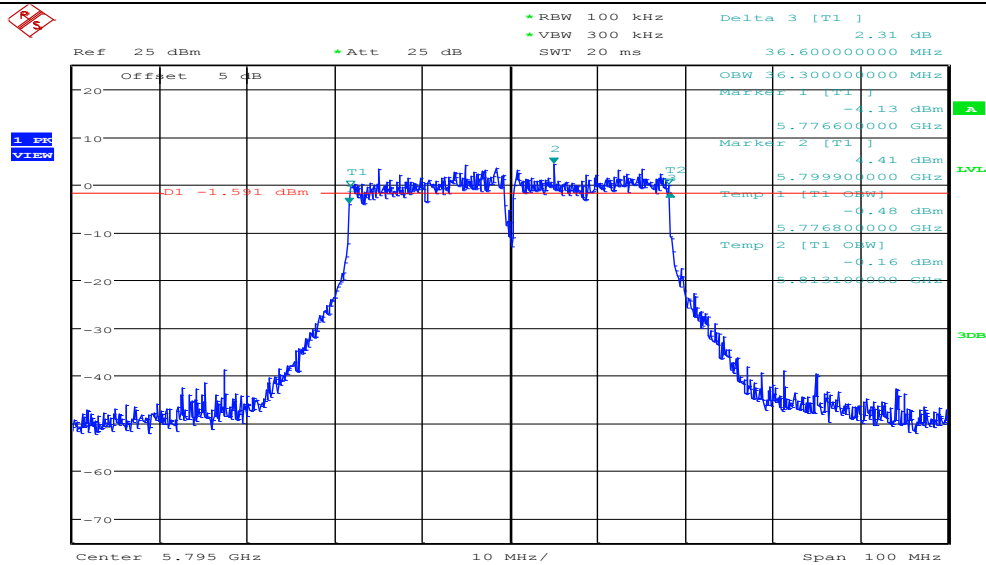
Date: 19.SEP.2018 14:33:01

11AC40MIMO_ANT1_5795



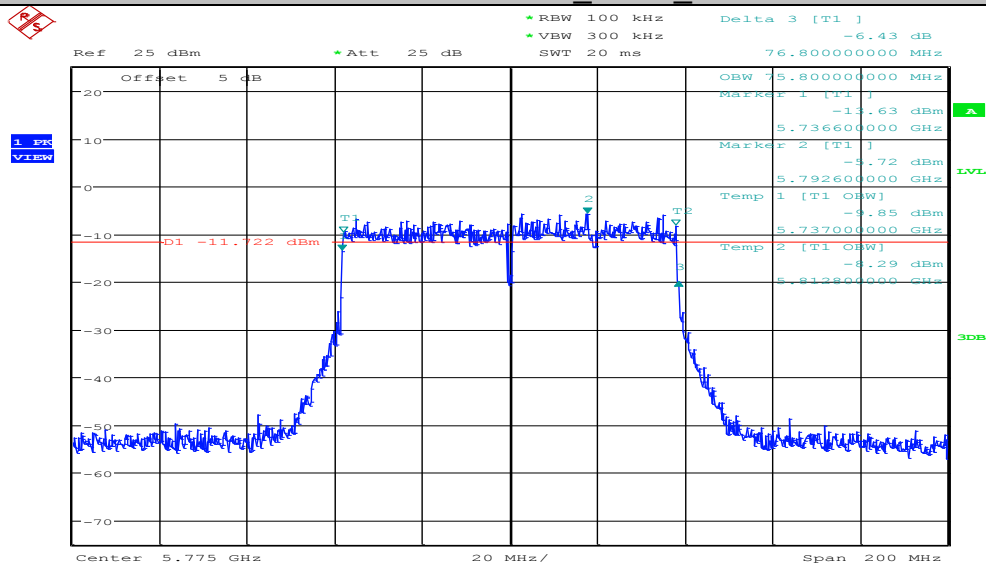
Date: 19.SEP.2018 10:21:34

11AC40MIMO_ANT2_5795



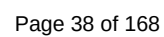
Date: 19.SEP.2018 14:34:04

11AC80MIMO_ANT1_5775



Date: 19.SEP.2018 10:25:48

11AC80MIMO_ANT2_5775



5. Maximum Output Power

5.1. Block diagram of test setup

Same as section 4.1

5.2. Limits

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Conducted Output Power	For 802.11a: 28dBm For 802.11n and 802.11ac: 28dBm	5150-5250
	For 802.11a: 28dBm For 802.11n and 802.11ac: 28dBm	5725-5850
Note: For 802.11n and 802.11ac, the EUT incorporates a MIMO function. The Antenna directional gain is 8dBi. The UNII-1 and UNII-3 Output Power limit is $30-(8-6) = 28\text{dBm}$		

5.3. Test Procedure

- (1) Connect each EUT's antenna output to Spectrum Analyzer by RF cable and attenuator
- (2) Add each antenna port's results to get the total output power of EUT.

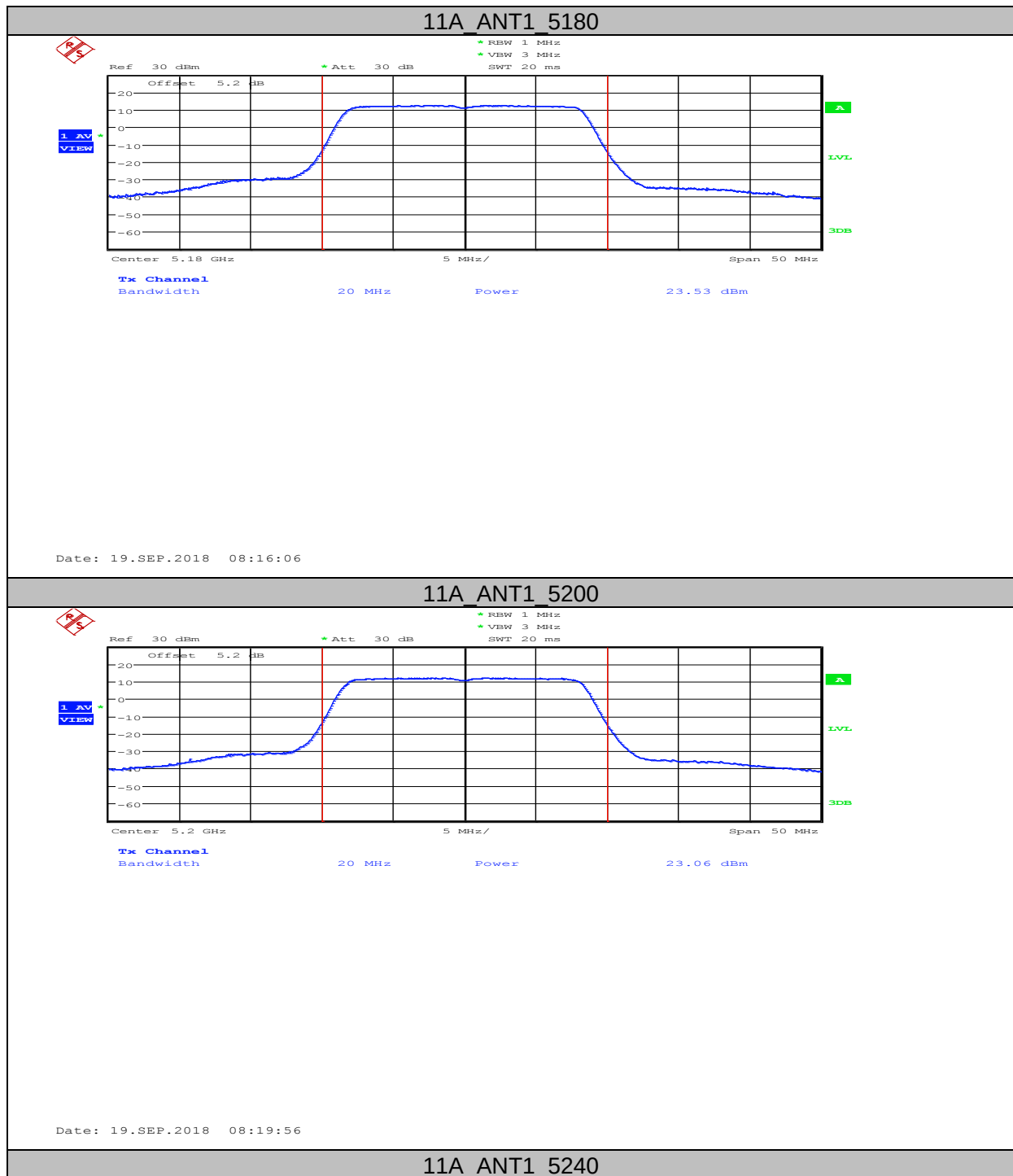
5.4. Test Result

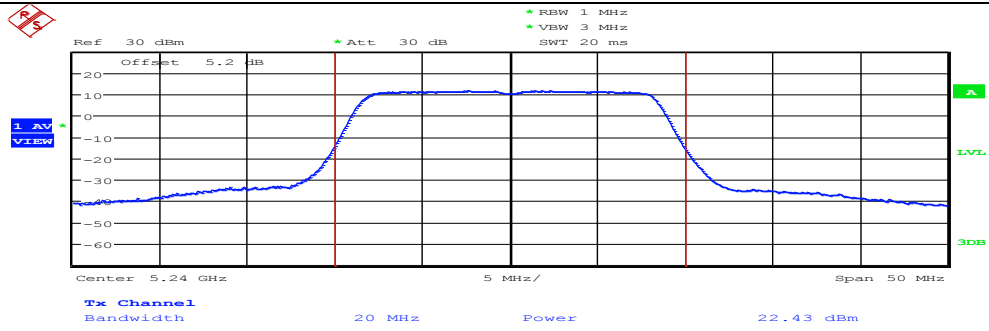
Test Mode	Antenna	Channel	Result	Limit	Verdict
11A	ANT1	5180	23.53	28	PASS
11A	ANT1	5200	23.06	28	PASS
11A	ANT1	5240	22.43	28	PASS
11A	ANT1	5745	22.65	28	PASS
11A	ANT1	5785	22.45	28	PASS
11A	ANT1	5825	21.78	28	PASS
11N20MIMO	ANT1	5180	20.40	28	PASS
11N20MIMO	ANT2	5180	20.11	28	PASS
11N20MIMO	total	5180	23.26	28	PASS
11N20MIMO	ANT1	5200	20.08	28	PASS
11N20MIMO	ANT2	5200	20.79	28	PASS
11N20MIMO	total	5200	23.47	28	PASS
11N20MIMO	ANT1	5240	20.39	28	PASS
11N20MIMO	ANT2	5240	20.89	28	PASS
11N20MIMO	total	5240	23.67	28	PASS
11N20MIMO	ANT1	5745	20.46	28	PASS
11N20MIMO	ANT2	5745	20.65	28	PASS
11N20MIMO	total	5745	23.61	28	PASS

11N20MIMO	ANT1	5785	20.13	28	PASS
11N20MIMO	ANT2	5785	21.04	28	PASS
11N20MIMO	total	5785	23.58	28	PASS
11N20MIMO	ANT1	5825	20.48	28	PASS
11N20MIMO	ANT2	5825	21.01	28	PASS
11N20MIMO	total	5825	23.77	28	PASS
11N40MIMO	ANT1	5190	19.50	28	PASS
11N40MIMO	ANT2	5190	20.28	28	PASS
11N40MIMO	total	5190	22.93	28	PASS
11N40MIMO	ANT1	5230	19.89	28	PASS
11N40MIMO	ANT2	5230	19.49	28	PASS
11N40MIMO	total	5230	22.71	28	PASS
11N40MIMO	ANT1	5755	19.89	28	PASS
11N40MIMO	ANT2	5755	18.98	28	PASS
11N40MIMO	total	5755	22.48	28	PASS
11N40MIMO	ANT1	5795	19.49	28	PASS
11N40MIMO	ANT2	5795	19.35	28	PASS
11N40MIMO	total	5795	22.46	28	PASS
11AC20MIMO	ANT1	5180	20.75	28	PASS
11AC20MIMO	ANT2	5180	20.33	28	PASS
11AC20MIMO	total	5180	23.57	28	PASS
11AC20MIMO	ANT1	5200	20.36	28	PASS
11AC20MIMO	ANT2	5200	19.99	28	PASS
11AC20MIMO	total	5200	23.21	28	PASS
11AC20MIMO	ANT1	5240	20.67	28	PASS
11AC20MIMO	ANT2	5240	21.16	28	PASS
11AC20MIMO	total	5240	23.97	28	PASS
11AC20MIMO	ANT1	5745	20.82	28	PASS
11AC20MIMO	ANT2	5745	20.96	28	PASS
11AC20MIMO	total	5745	23.91	28	PASS
11AC20MIMO	ANT1	5785	20.55	28	PASS
11AC20MIMO	ANT2	5785	21.34	28	PASS
11AC20MIMO	total	5785	23.97	28	PASS
11AC20MIMO	ANT1	5825	20.70	28	PASS
11AC20MIMO	ANT2	5825	20.26	28	PASS
11AC20MIMO	total	5825	23.51	28	PASS
11AC40MIMO	ANT1	5190	19.87	28	PASS
11AC40MIMO	ANT2	5190	19.49	28	PASS
11AC40MIMO	total	5190	22.71	28	PASS

11AC40MIMO	ANT1	5230	19.23	28	PASS
11AC40MIMO	ANT2	5230	19.74	28	PASS
11AC40MIMO	total	5230	22.47	28	PASS
11AC40MIMO	ANT1	5755	19.07	28	PASS
11AC40MIMO	ANT2	5755	19.19	28	PASS
11AC40MIMO	total	5755	22.16	28	PASS
11AC40MIMO	ANT1	5795	19.78	28	PASS
11AC40MIMO	ANT2	5795	19.54	28	PASS
11AC40MIMO	total	5795	22.66	28	PASS
11AC80MIMO	ANT1	5210	13.63	28	PASS
11AC80MIMO	ANT2	5210	14.11	28	PASS
11AC80MIMO	total	5210	16.87	28	PASS
11AC80MIMO	ANT1	5775	13.31	28	PASS
11AC80MIMO	ANT2	5775	13.31	28	PASS
11AC80MIMO	total	5775	16.31	28	PASS

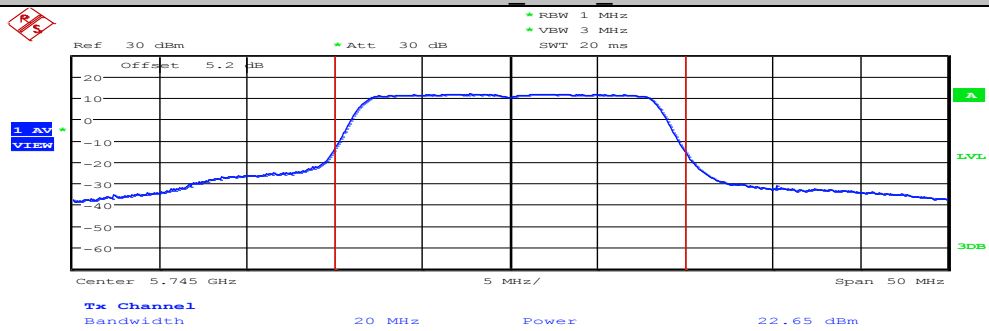
5.5. Original test data





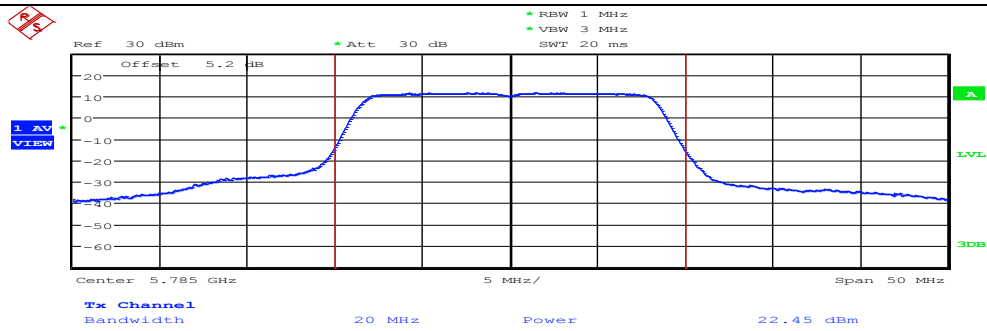
Date: 19.SEP.2018 08:21:09

11A ANT1 5745



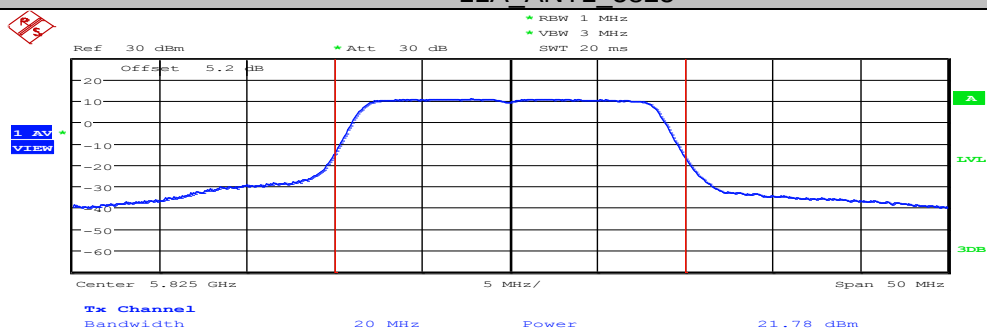
Date: 19.SEP.2018 08:22:16

11A ANT1 5785



Date: 19.SEP.2018 08:23:29

11A ANT1_5825

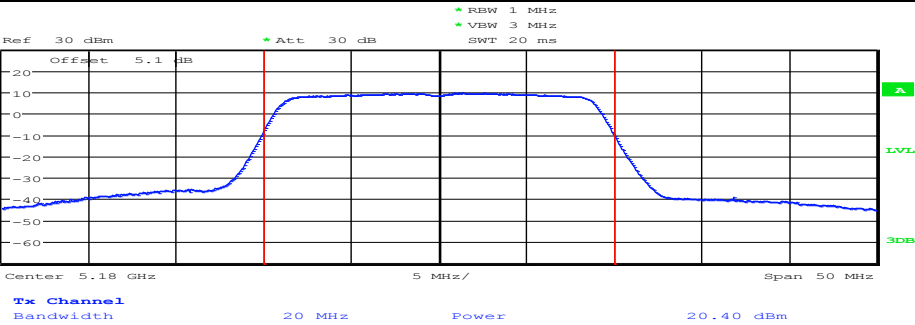


Date: 19.SEP.2018 08:24:34

11N20MIMO_ANT1_5180



1 AV
VIEW

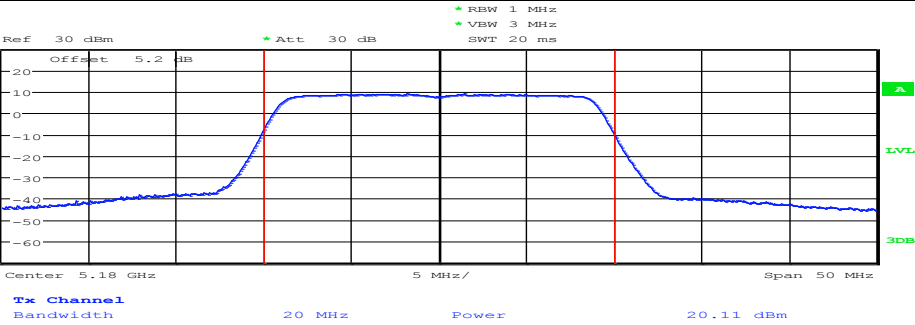


Date: 19.SEP.2018 08:28:04

11N20MIMO_ANT2_5180

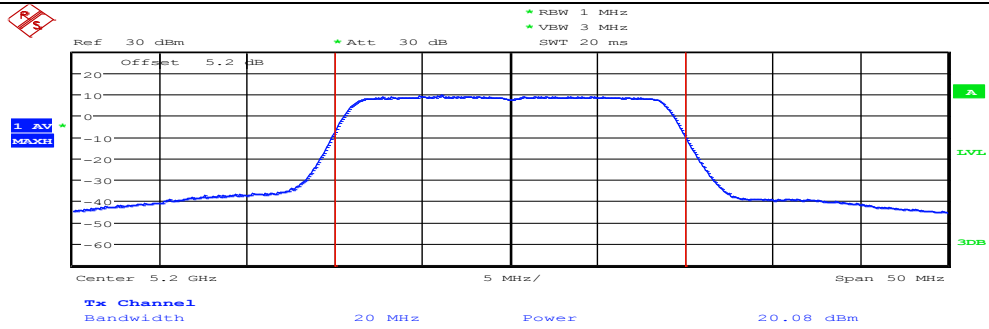


1 AV
VIEW



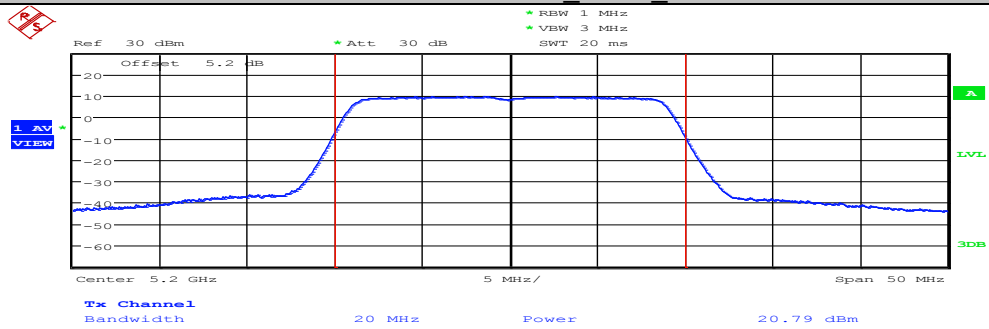
Date: 19.SEP.2018 10:33:47

11N20MIMO_ANT1_5200



Date: 19.SEP.2018 08:30:04

11N20MIMO_ANT2_5200

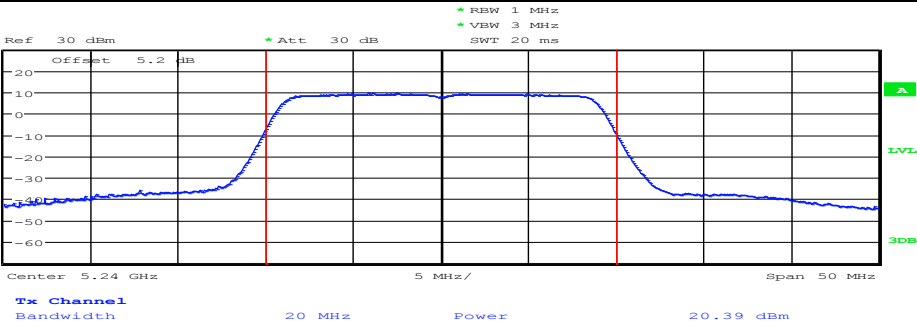


Date: 19.SEP.2018 10:59:09

11N20MIMO_ANT1_5240



1 AV
MAXH

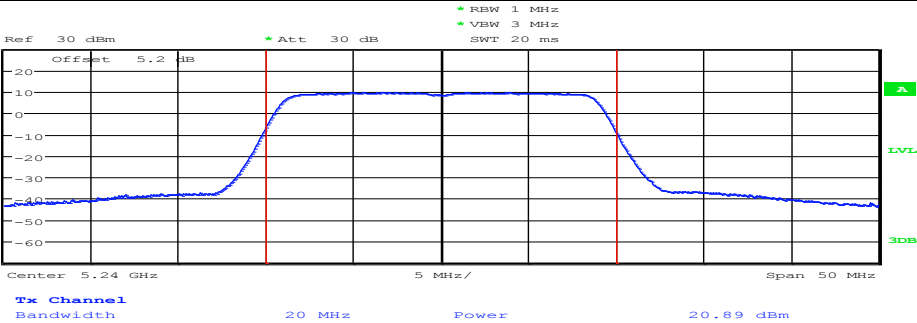


Date: 19.SEP.2018 08:31:43

11N20MIMO_ANT2_5240

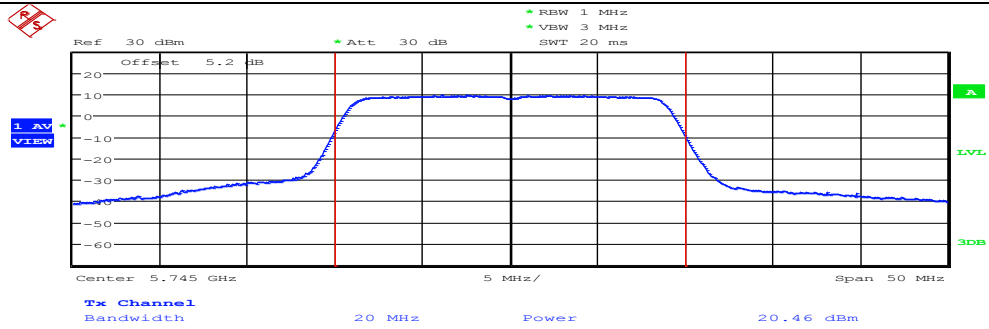


1 AV
VIEW



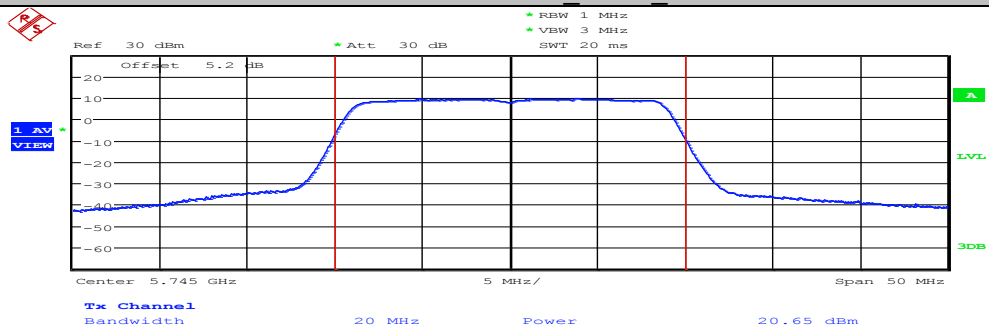
Date: 19.SEP.2018 11:01:30

11N20MIMO_ANT1_5745



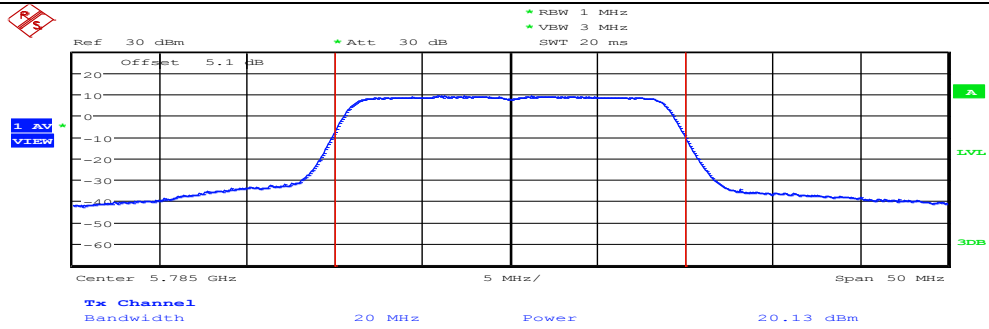
Date: 19.SEP.2018 08:35:46

11N20MIMO_ANT2_5745



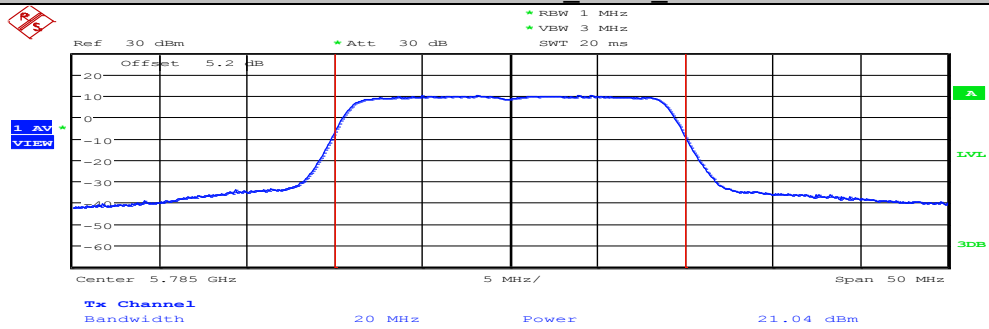
Date: 19.SEP.2018 11:02:36

11N20MIMO_ANT1_5785



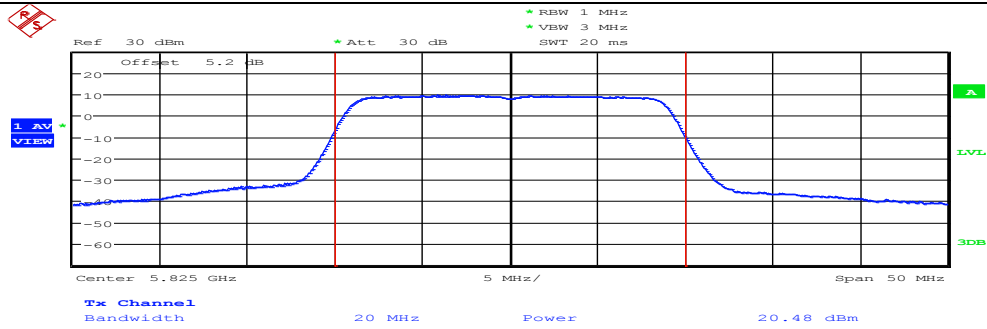
Date: 19.SEP.2018 08:40:31

11N20MIMO_ANT2_5785



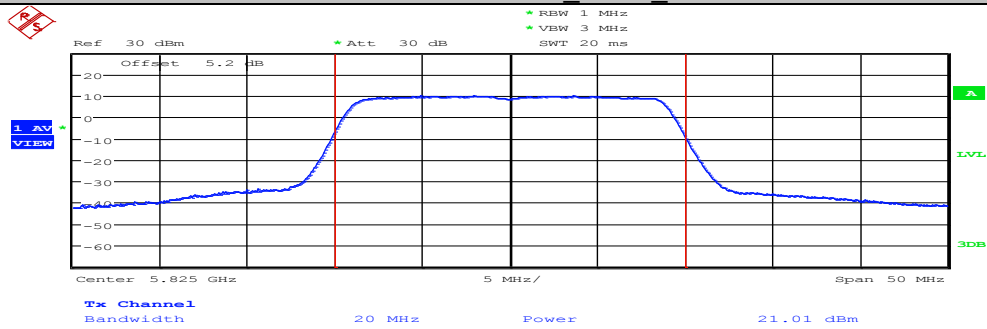
Date: 19.SEP.2018 11:03:46

11N20MIMO_ANT1_5825



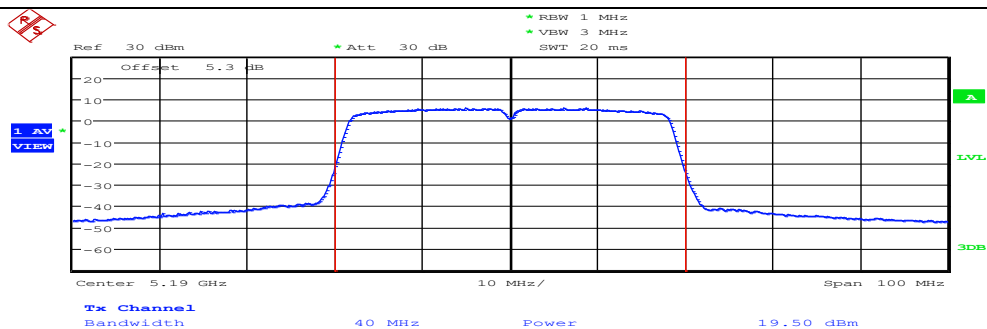
Date: 19.SEP.2018 08:49:41

11N20MIMO_ANT2_5825



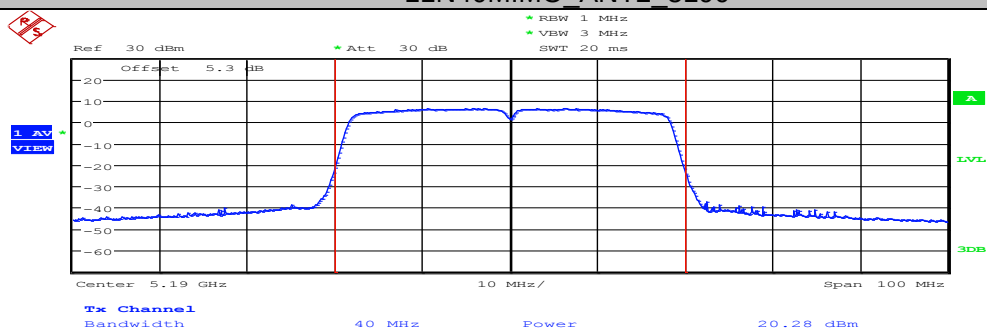
Date: 19.SEP.2018 11:05:44

11N40MIMO_ANT1_5190



Date: 19.SEP.2018 09:15:12

11N40MIMO_ANT2_5190

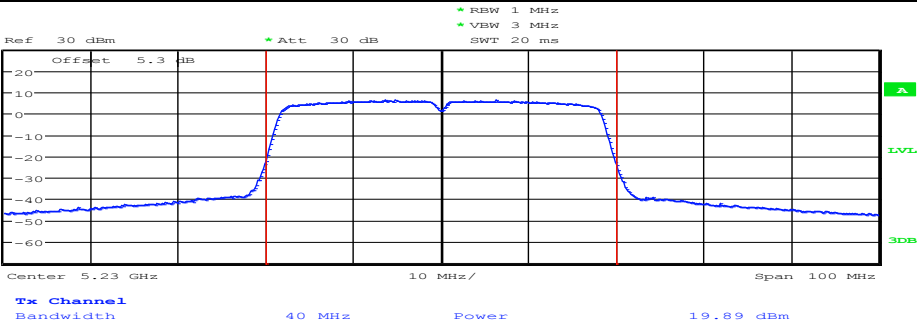


Date: 19.SEP.2018 14:19:04

11N40MIMO_ANT1_5230



1 AV
VIEW

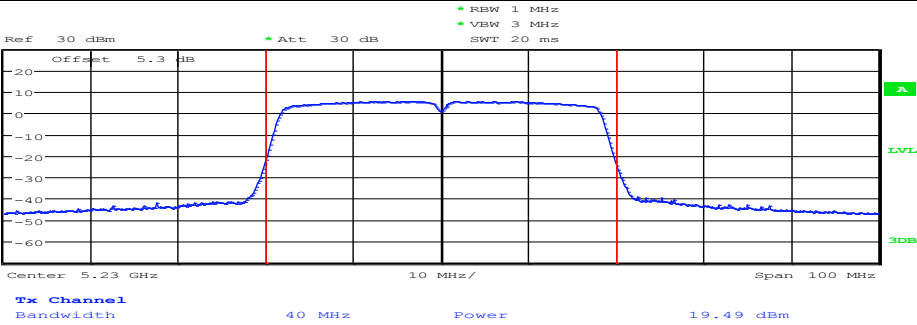


Date: 19.SEP.2018 09:20:49

11N40MIMO_ANT2_5230

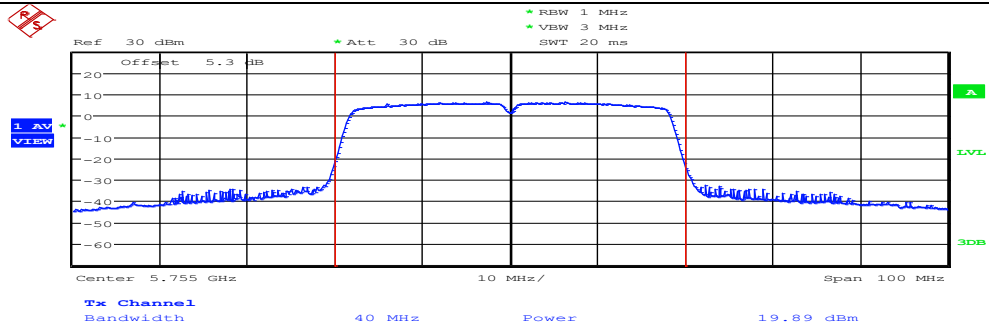


1 AV
VIEW



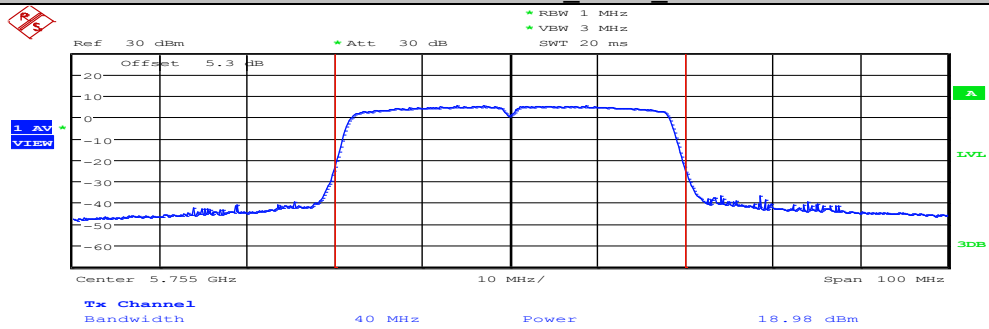
Date: 19.SEP.2018 14:20:14

11N40MIMO_ANT1_5755



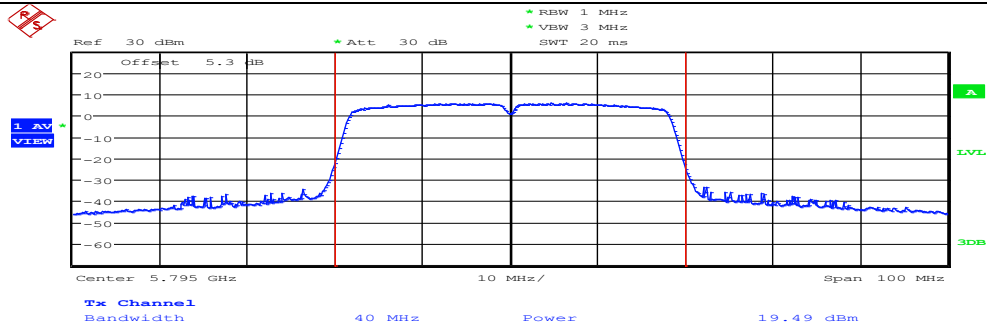
Date: 19.SEP.2018 10:12:03

11N40MIMO_ANT2_5755



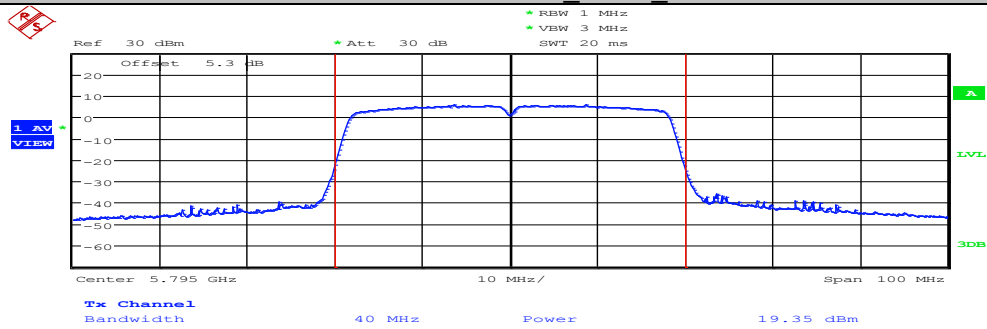
Date: 19.SEP.2018 14:21:42

11N40MIMO_ANT1_5795



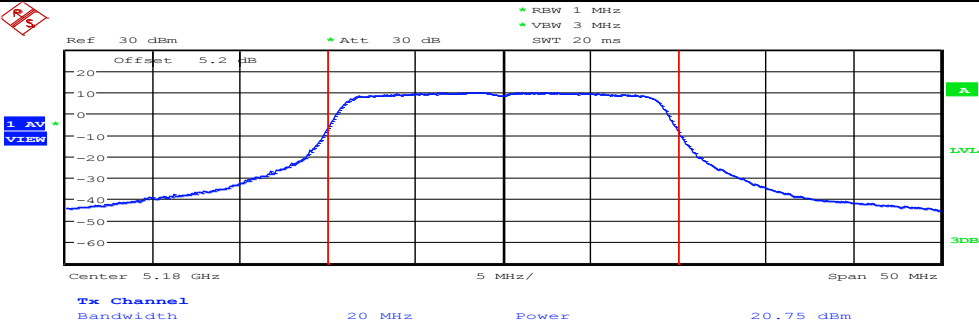
Date: 19.SEP.2018 10:13:12

11N40MIMO_ANT2_5795



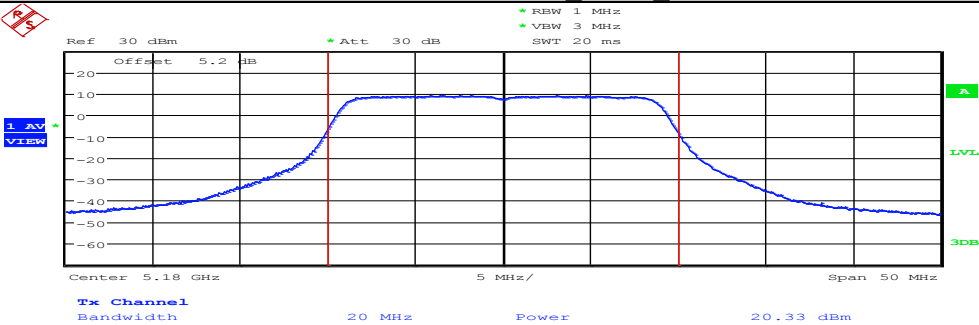
Date: 19.SEP.2018 14:27:46

11AC20MIMO_ANT1_5180



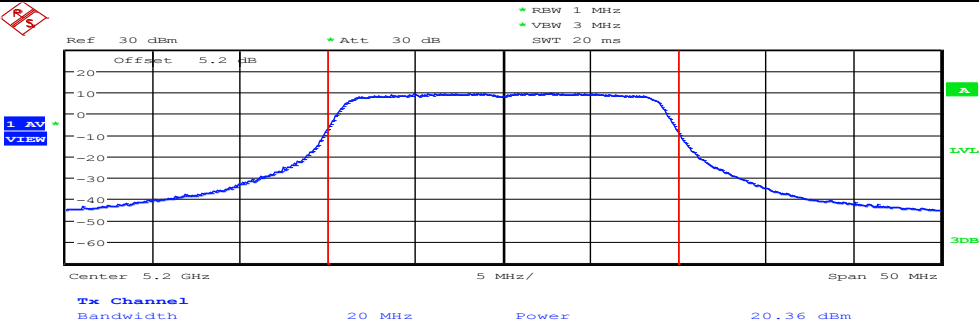
Date: 19.SEP.2018 08:53:32

11AC20MIMO ANT2 5180



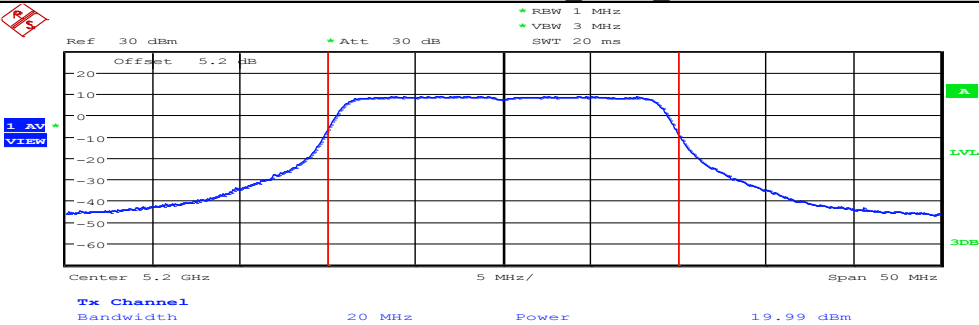
Date: 19.SEP.2018 11:09:05

11AC20MIMO ANT1 5200



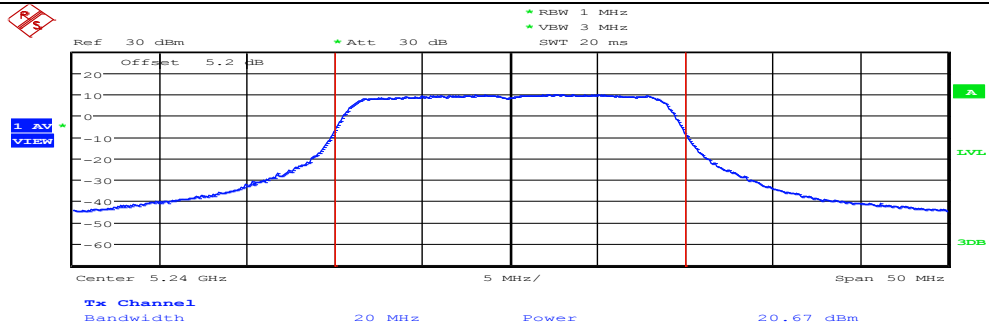
Date: 19.SEP.2018 08:54:49

11AC20MIMO ANT2 5200



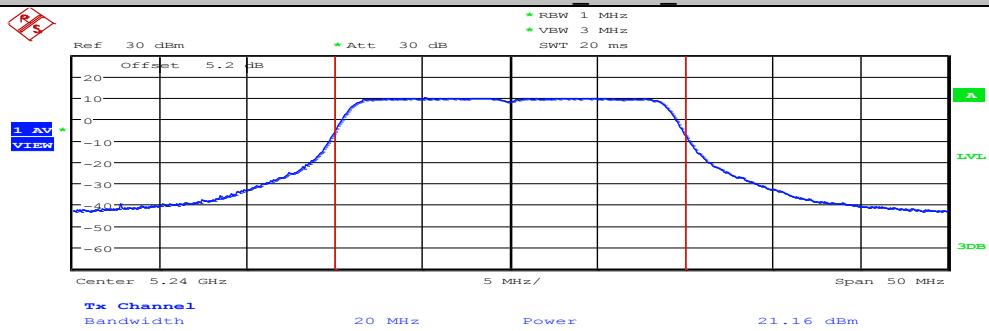
Date: 19.SEP.2018 11:13:07

11AC20MIMO ANT1 5240



Date: 19.SEP.2018 08:58:39

11AC20MIMO ANT2 5240

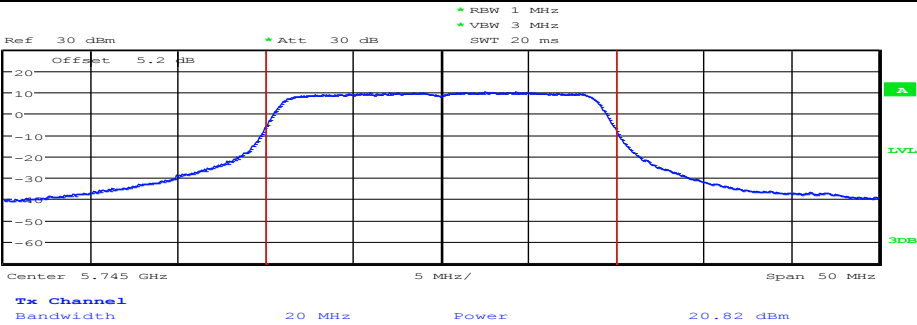


Date: 19.SEP.2018 11:14:21

11AC20MIMO ANT1 5745



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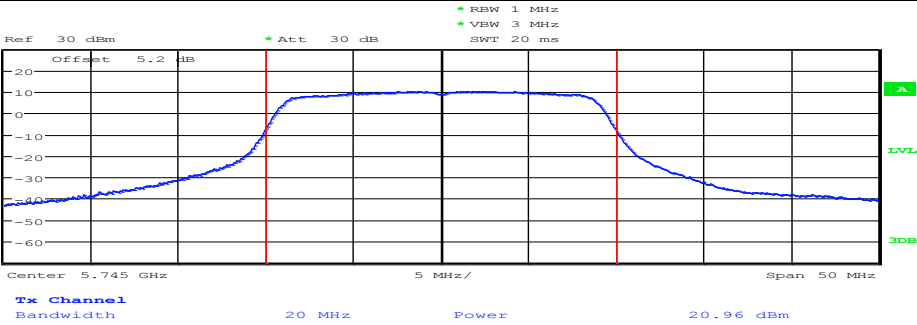


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11AC20MIMO ANT2 5745

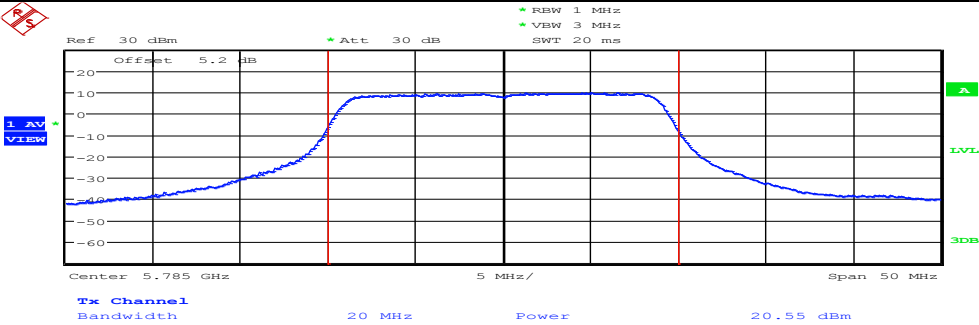


1 AV
VIEW



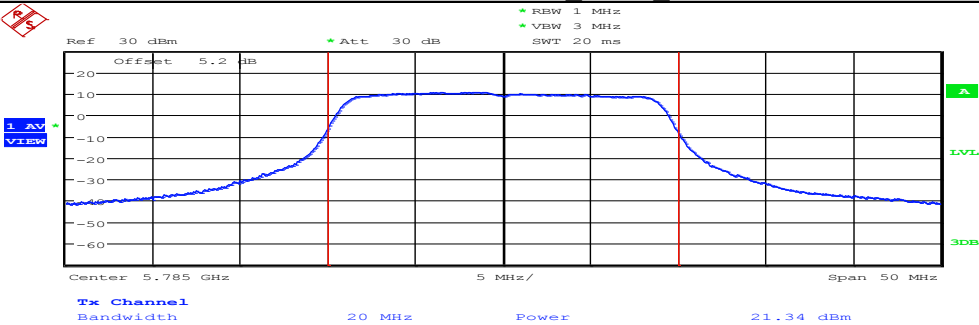
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11AC20MIMO ANT1 5785



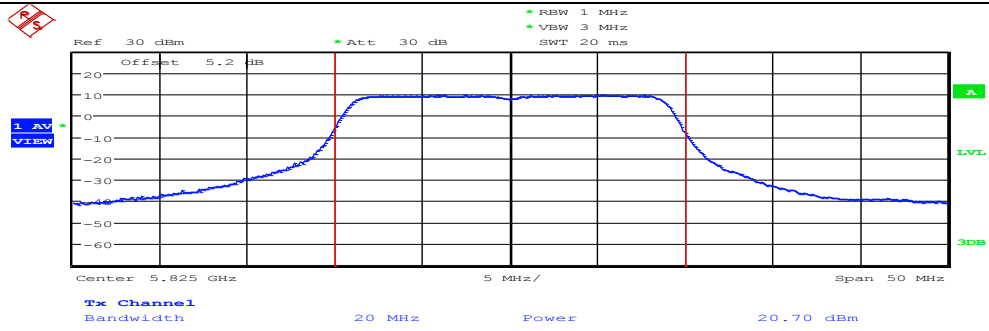
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11AC20MIMO ANT2 5785

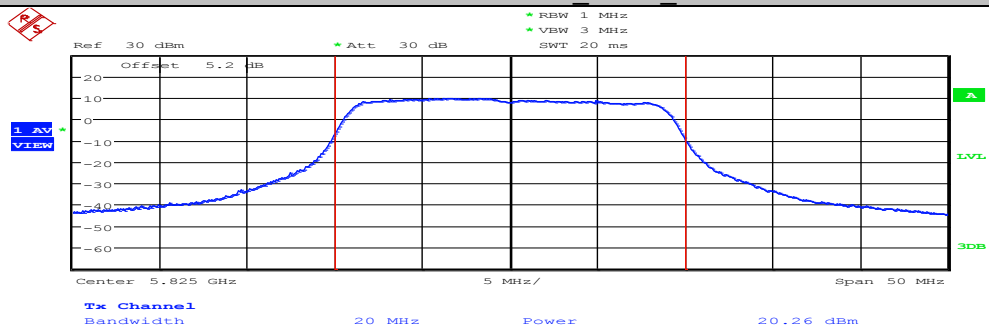


Date: 19.SEP.2018 14:15:02

11AC20MIMO ANT1 5825

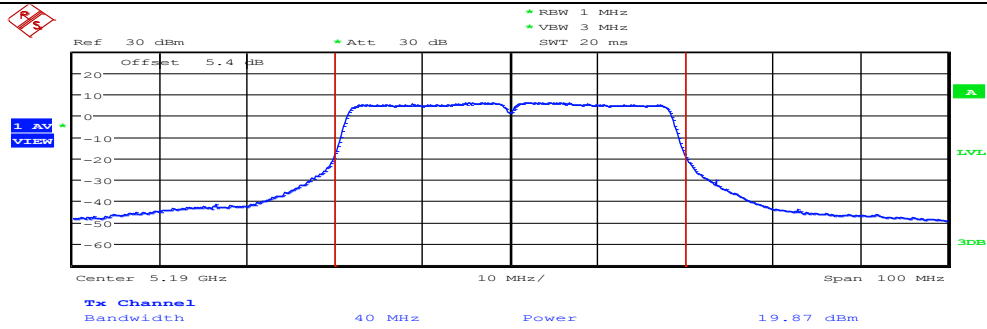


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11AC20MIMO ANT2 5825

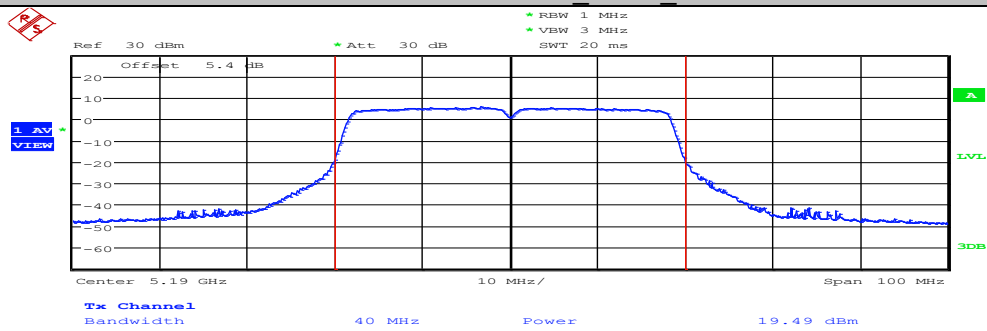
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11AC40MIMO ANT1 5190



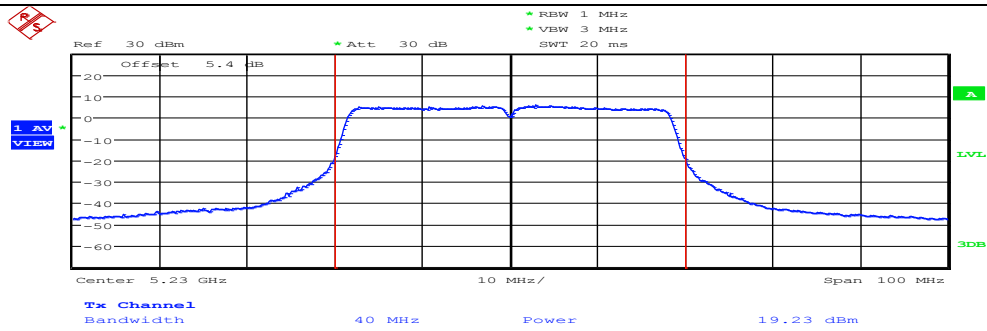
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11AC40MIMO ANT2 5190

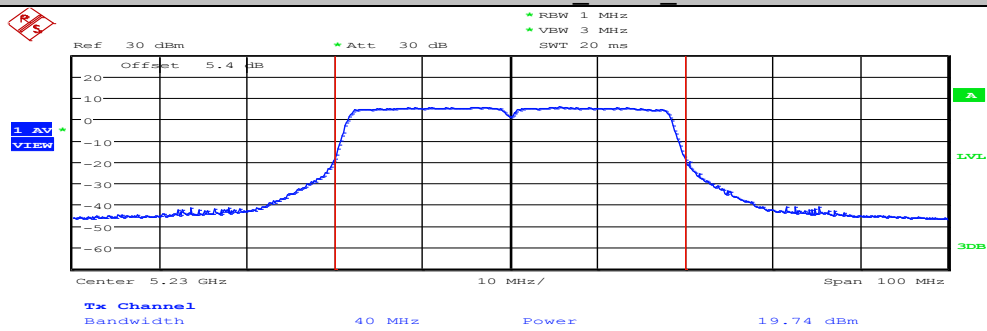


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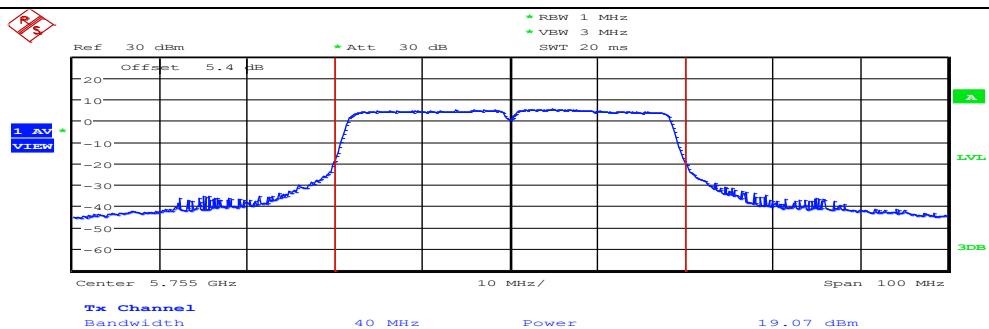


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11AC40MIMO ANT2 5230

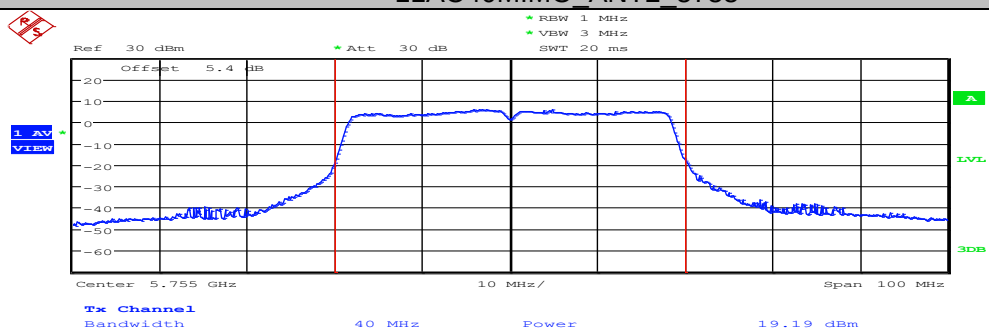
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11AC40MIMO ANT1 5755



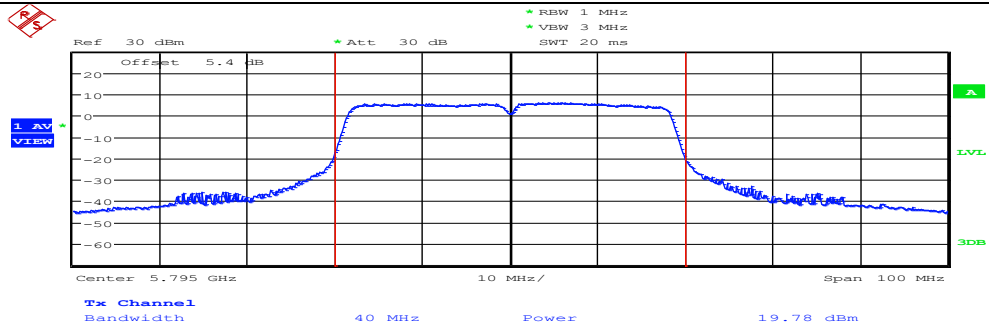
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11AC40MIMO ANT2 5755



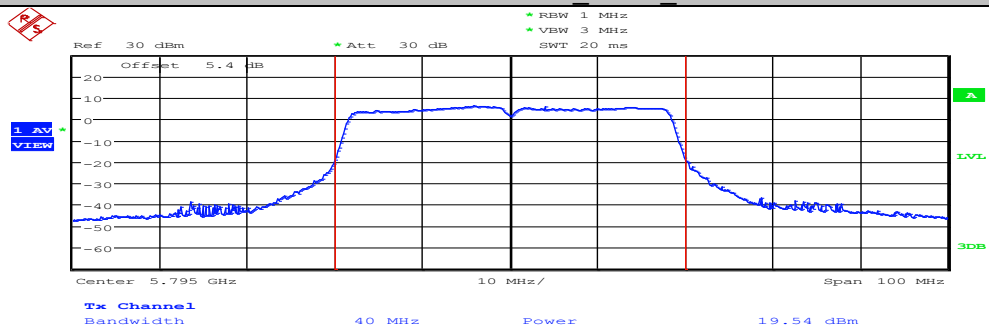
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11AC40MIMO ANT1 5795



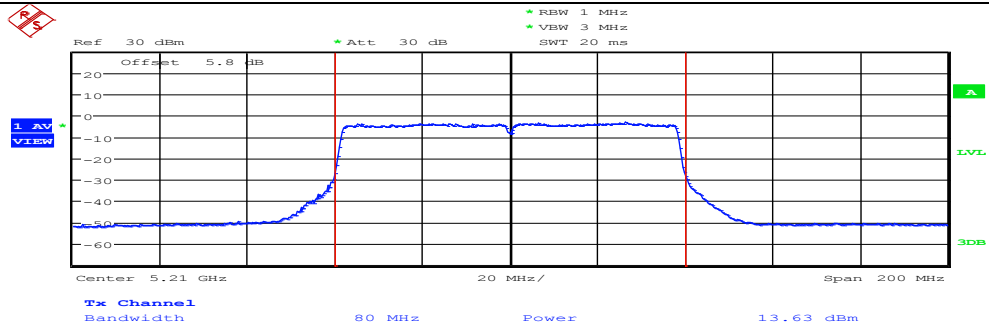
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11AC40MIMO ANT2 5795

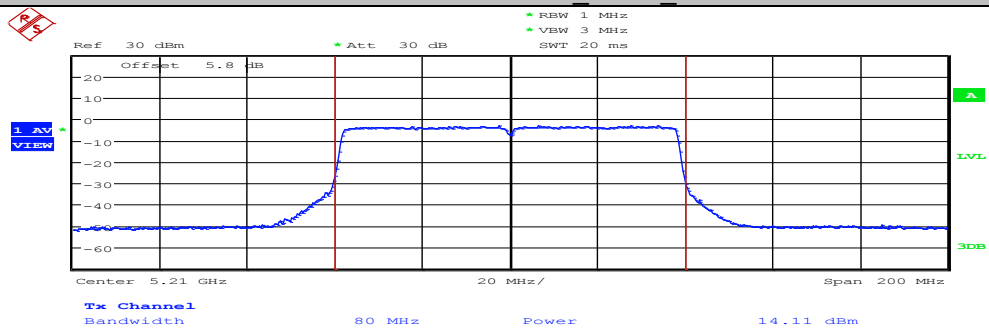


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11AC80MIMO ANT1 5210

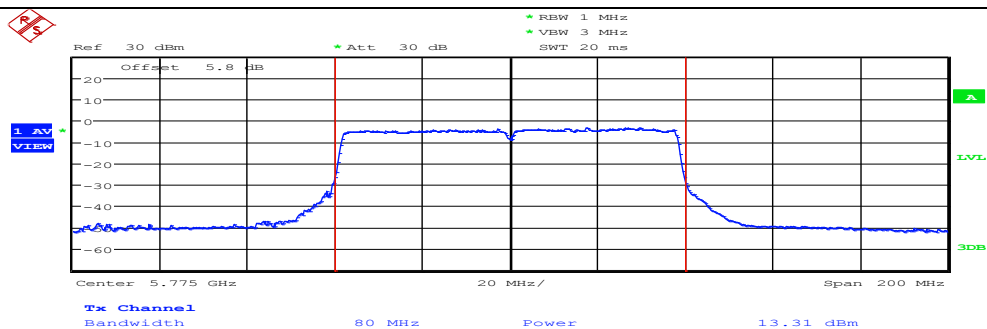


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11AC80MIMO_ANT2_5210

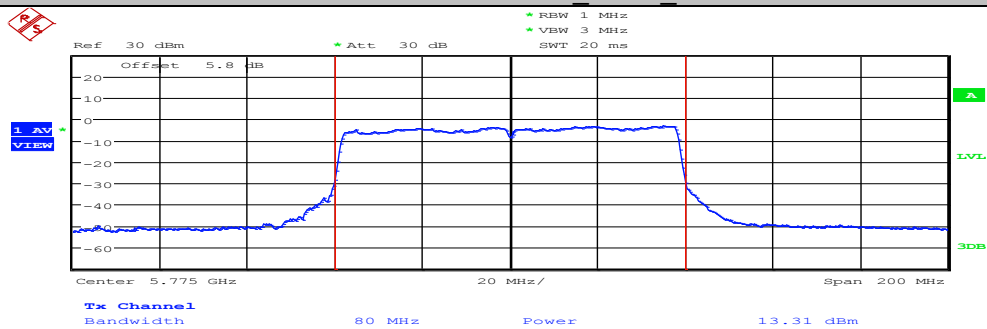
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11AC80MIMO_ANT1_5775



Date: 19.SEP.2018 10:26:08

11AC80MIMO_ANT2_5775



Date: 19.SEP.2018 14:38:54

6. Power Spectral Density

6.1. Block diagram of test setup

Same with 4.1

6.2. Limits

FCC Part15, Subpart E		
Test Item	Limit	Frequency Range (MHz)
Power Spectral Density	For 802.11a: 15dBm/MHz For 802.11n and 802.11ac: 15dBm/MHz	5150-5250
	For 802.11a: 28dBm/500kHz For 802.11n and 802.11ac: 28dBm/500kHz	5725-5850
Note: For 802.11n and 802.11ac, the EUT incorporates a MIMO function. The Antenna directional gain is 8dBi. The UNII-1 Power Spectral Density limit is $17-(8-6) = 15\text{dBm/MHz}$ The UNII-3 Power Spectral Density limit is $30-(8-6) = 28\text{dBm/500kHz}$		

6.3. Test Procedure

The transmitter output was connected to a spectrum analyzer, use the following settings:
5150MHz~5250MHz

Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	1MHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

5725MHz-5850MHz

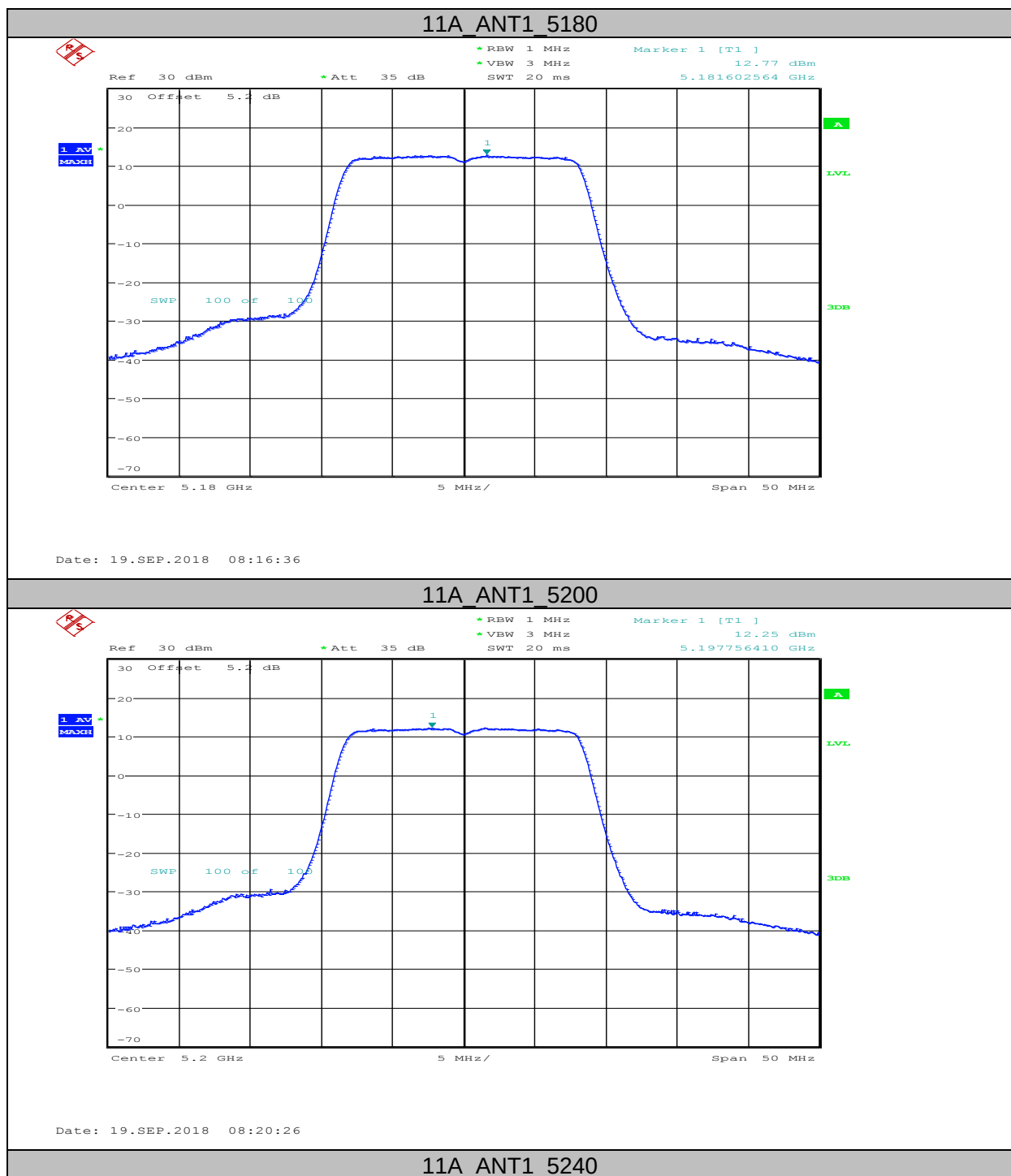
Center Frequency	The centre frequency of the channel under test
Detector	RMS
RBW	500kHz
VBW	$\geq 3 \times \text{RBW}$
Span	Encompass the entire emissions bandwidth (EBW) of the signal
Trace	Max hold
Sweep time	Auto

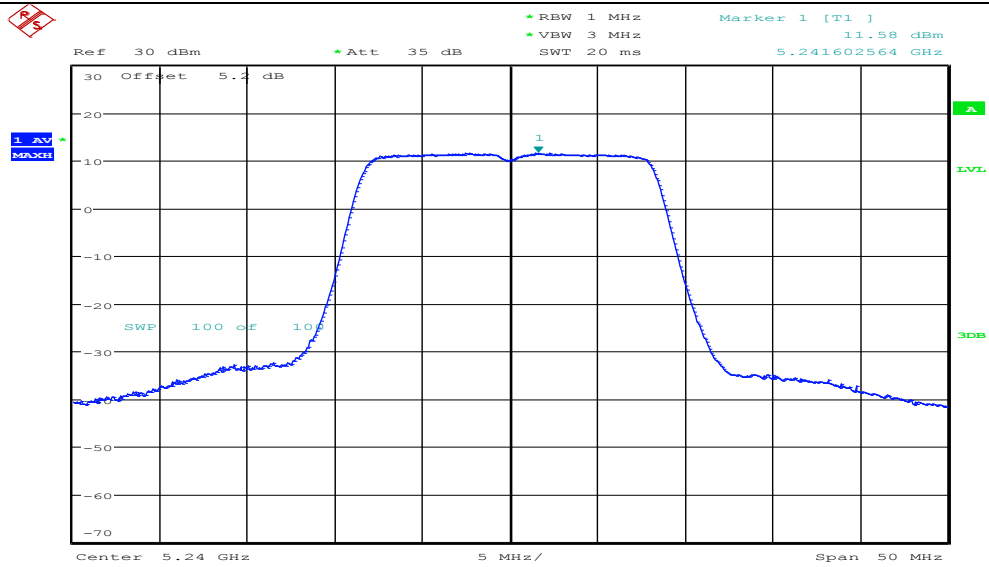
Allow trace to fully stabilize and use the peak marker function to determine the maximum amplitude level within the RBW.

6.4. Test Result

Test Mode	Antenna	Channel	Result	Limit	Verdict
11A	ANT1	5180	12.77	15	PASS
11A	ANT1	5200	12.25	15	PASS
11A	ANT1	5240	11.58	15	PASS
11A	ANT1	5745	9.47	28	PASS
11A	ANT1	5785	9.18	28	PASS
11A	ANT1	5825	8.57	28	PASS
11N20MIMO	ANT1	5180	9.63	15	PASS
11N20MIMO	ANT2	5180	9.17	15	PASS
11N20MIMO	total	5180	12.42	15	PASS
11N20MIMO	ANT1	5200	9.40	15	PASS
11N20MIMO	ANT2	5200	9.84	15	PASS
11N20MIMO	total	5200	12.64	15	PASS
11N20MIMO	ANT1	5240	9.81	15	PASS
11N20MIMO	ANT2	5240	9.82	15	PASS
11N20MIMO	total	5240	12.83	15	PASS
11N20MIMO	ANT1	5745	7.70	28	PASS
11N20MIMO	ANT2	5745	8.01	28	PASS
11N20MIMO	total	5745	10.87	28	PASS
11N20MIMO	ANT1	5785	7.53	28	PASS
11N20MIMO	ANT2	5785	8.29	28	PASS
11N20MIMO	total	5785	10.94	28	PASS
11N20MIMO	ANT1	5825	7.63	28	PASS
11N20MIMO	ANT2	5825	8.07	28	PASS
11N20MIMO	total	5825	10.87	28	PASS
11N40MIMO	ANT1	5190	3.99	15	PASS
11N40MIMO	ANT2	5190	6.66	15	PASS
11N40MIMO	total	5190	8.54	15	PASS
11N40MIMO	ANT1	5230	6.41	15	PASS
11N40MIMO	ANT2	5230	5.95	15	PASS
11N40MIMO	total	5230	9.20	15	PASS
11N40MIMO	ANT1	5755	3.88	28	PASS
11N40MIMO	ANT2	5755	3.43	28	PASS
11N40MIMO	total	5755	6.67	28	PASS
11N40MIMO	ANT1	5795	3.83	28	PASS
11N40MIMO	ANT2	5795	4.00	28	PASS
11N40MIMO	total	5795	6.93	28	PASS
11AC20MIMO	ANT1	5180	10.03	15	PASS

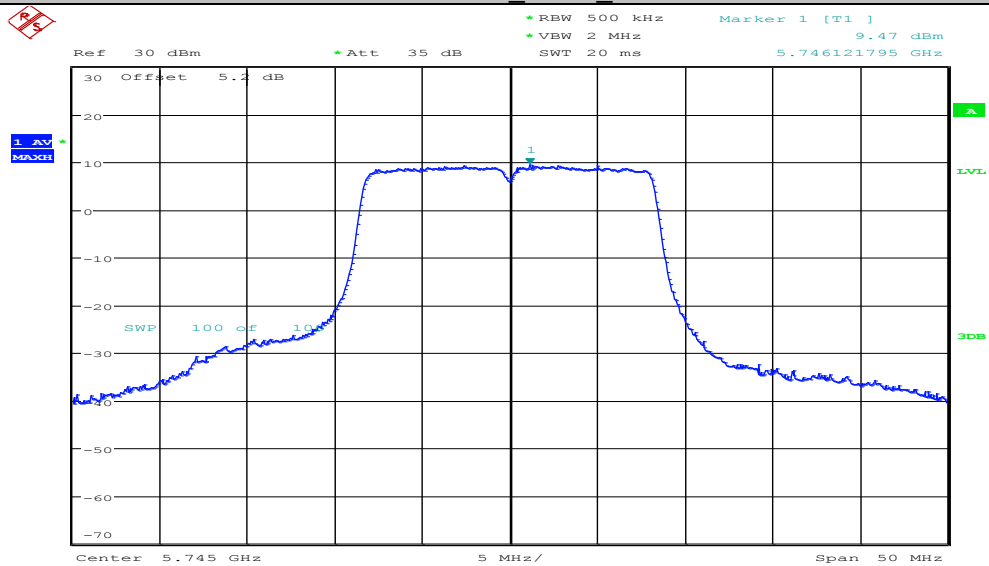
11AC20MIMO	ANT2	5180	9.45	15	PASS
11AC20MIMO	total	5180	12.76	15	PASS
11AC20MIMO	ANT1	5200	9.66	15	PASS
11AC20MIMO	ANT2	5200	9.13	15	PASS
11AC20MIMO	total	5200	12.41	15	PASS
11AC20MIMO	ANT1	5240	10.00	15	PASS
11AC20MIMO	ANT2	5240	9.99	15	PASS
11AC20MIMO	total	5240	13.01	15	PASS
11AC20MIMO	ANT1	5745	7.77	28	PASS
11AC20MIMO	ANT2	5745	7.92	28	PASS
11AC20MIMO	total	5745	10.86	28	PASS
11AC20MIMO	ANT1	5785	7.34	28	PASS
11AC20MIMO	ANT2	5785	8.45	28	PASS
11AC20MIMO	total	5785	10.94	28	PASS
11AC20MIMO	ANT1	5825	7.49	28	PASS
11AC20MIMO	ANT2	5825	7.59	28	PASS
11AC20MIMO	total	5825	10.55	28	PASS
11AC40MIMO	ANT1	5190	6.32	15	PASS
11AC40MIMO	ANT2	5190	5.64	15	PASS
11AC40MIMO	total	5190	9.00	15	PASS
11AC40MIMO	ANT1	5230	5.66	15	PASS
11AC40MIMO	ANT2	5230	5.75	15	PASS
11AC40MIMO	total	5230	8.72	15	PASS
11AC40MIMO	ANT1	5755	3.07	28	PASS
11AC40MIMO	ANT2	5755	3.47	28	PASS
11AC40MIMO	total	5755	6.28	28	PASS
11AC40MIMO	ANT1	5795	3.85	28	PASS
11AC40MIMO	ANT2	5795	4.12	28	PASS
11AC40MIMO	total	5795	7.00	28	PASS
11AC80MIMO	ANT1	5210	-3.08	15	PASS
11AC80MIMO	ANT2	5210	-2.76	15	PASS
11AC80MIMO	total	5210	0.09	15	PASS
11AC80MIMO	ANT1	5775	-5.86	28	PASS
11AC80MIMO	ANT2	5775	-5.44	28	PASS
11AC80MIMO	total	5775	-2.63	28	PASS





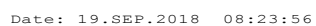
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11A ANT1 5745



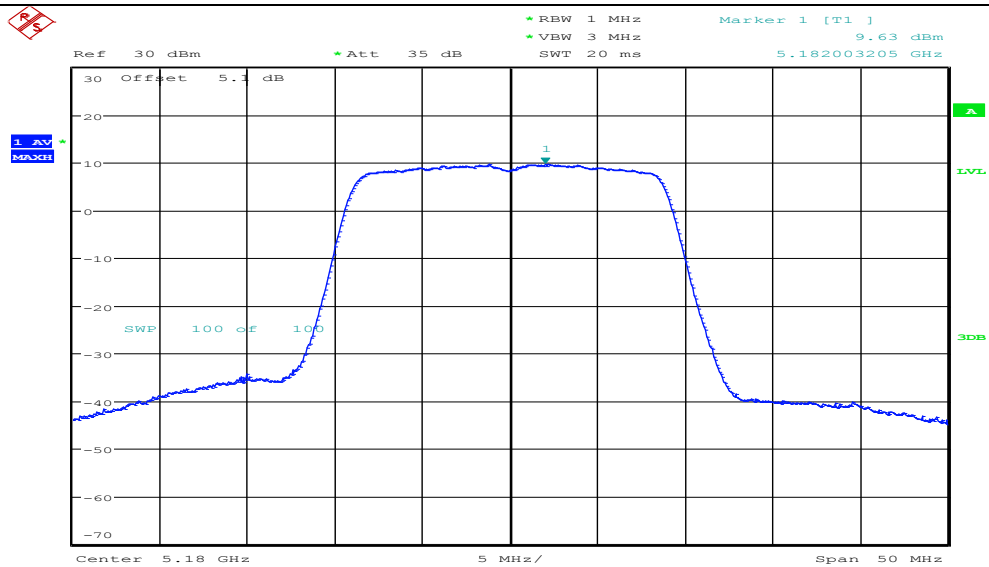
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11A ANT1 5785



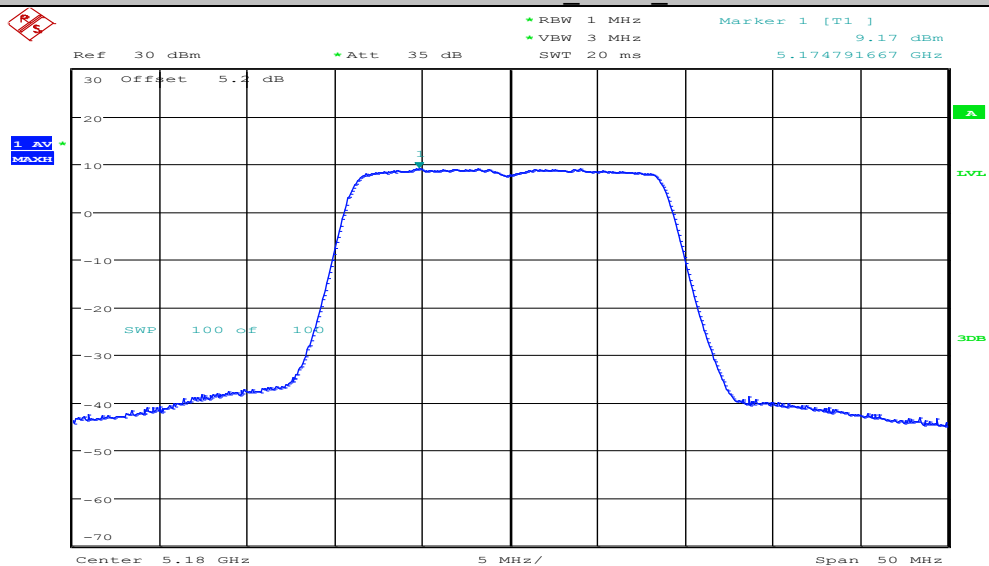
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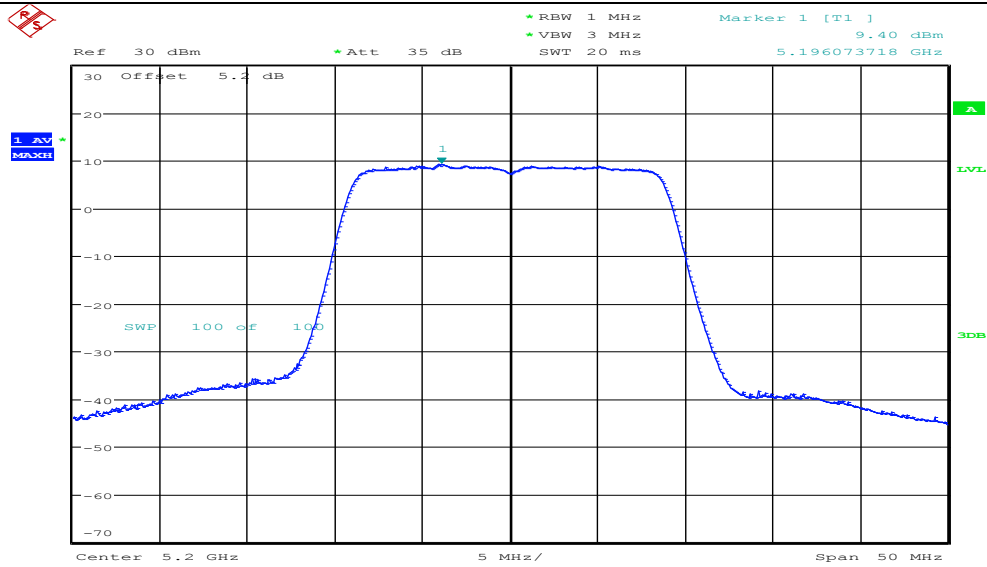
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11N20MIMO_ANT2_5180



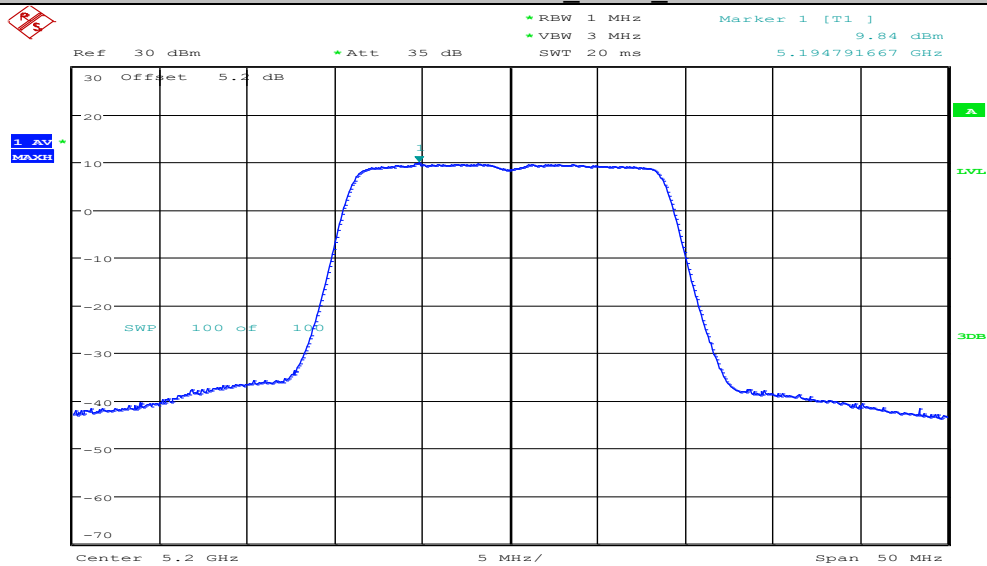
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11N20MIMO_ANT1_5200



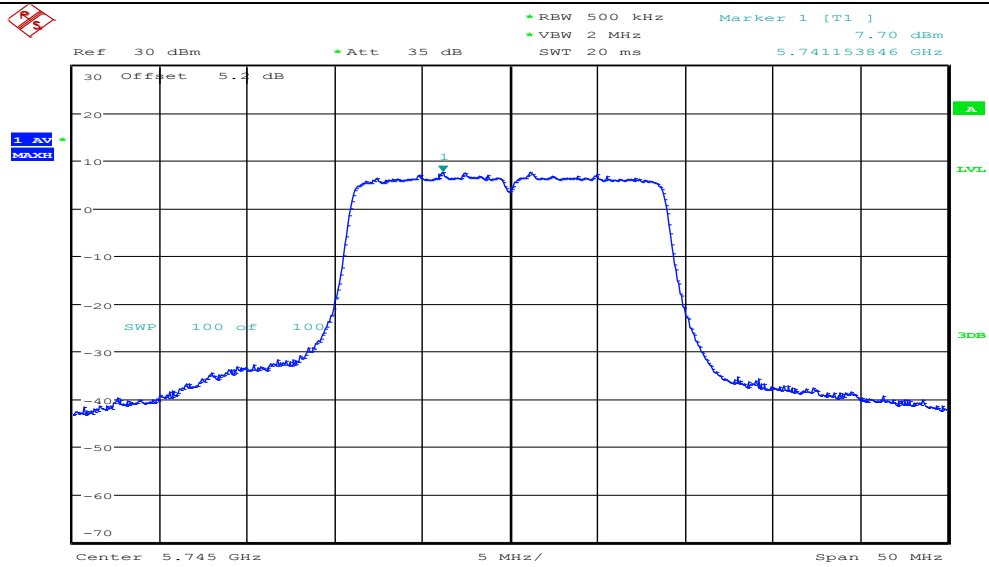
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11N20MIMO_ANT2_5200



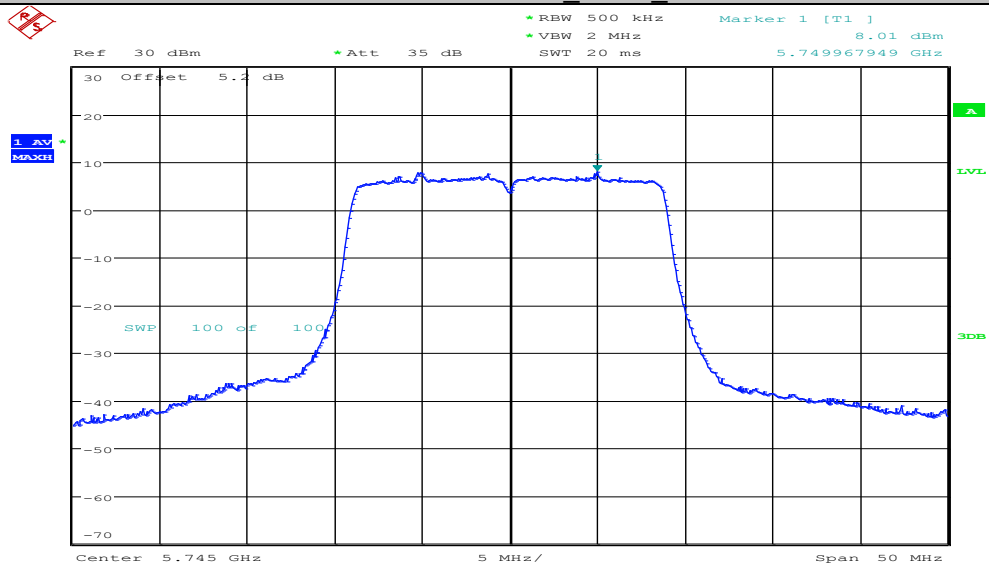
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11N20MIMO_ANT1_5240



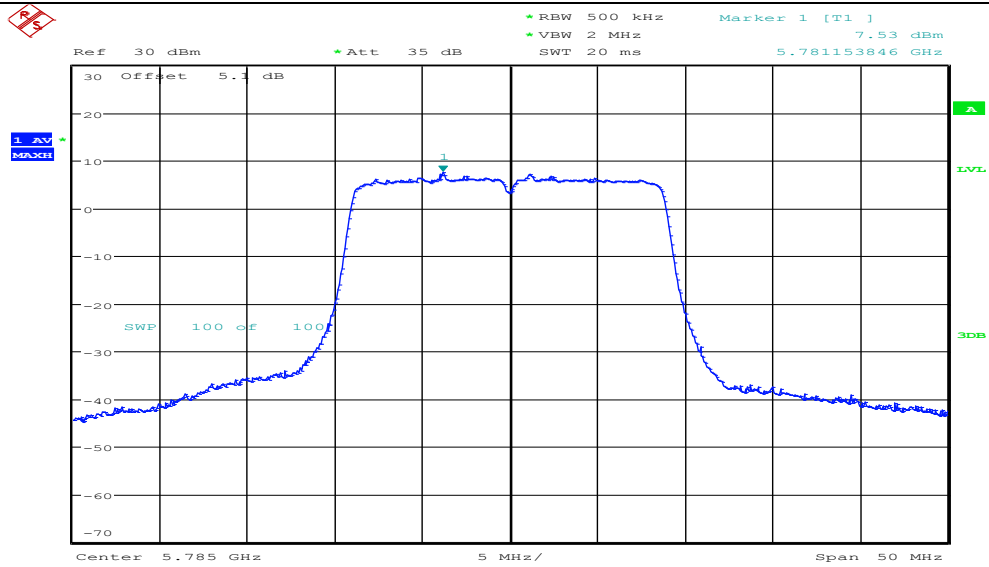
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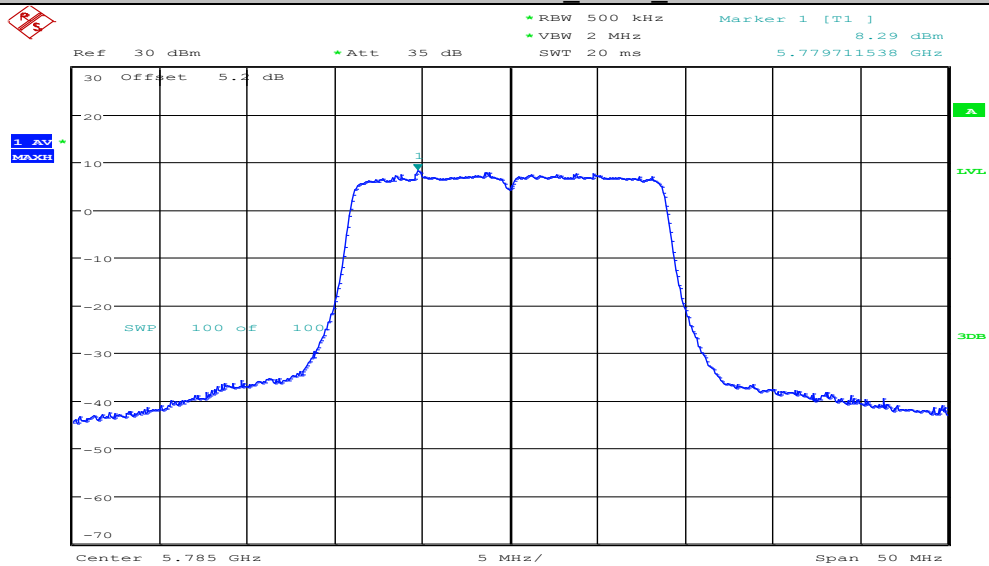
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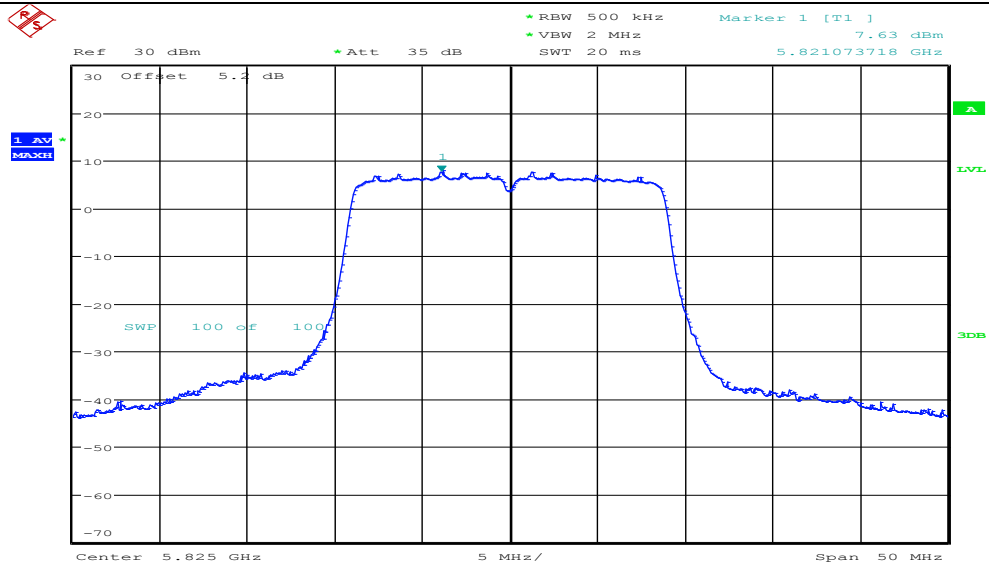
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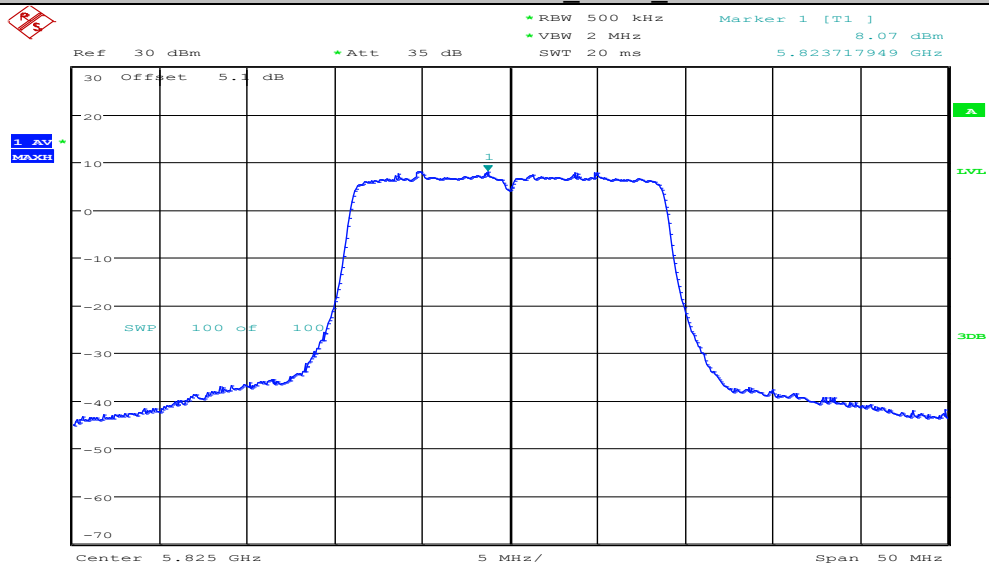
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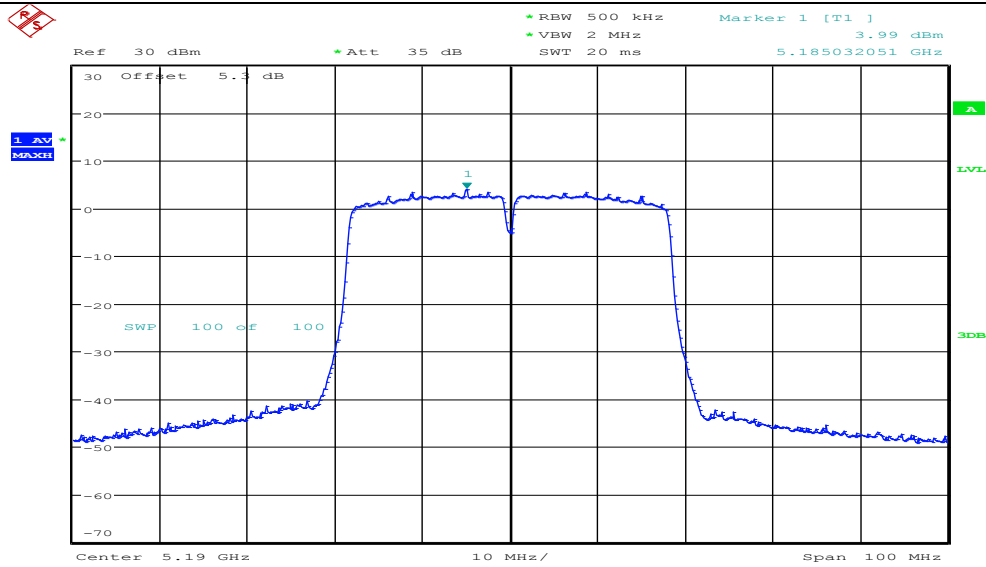
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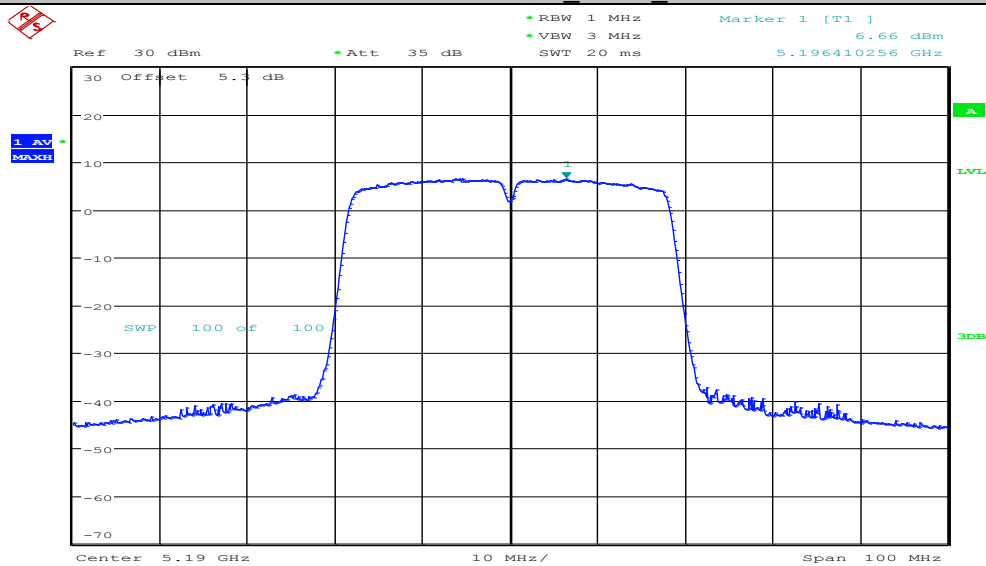
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11N40MIMO_ANT1_5190



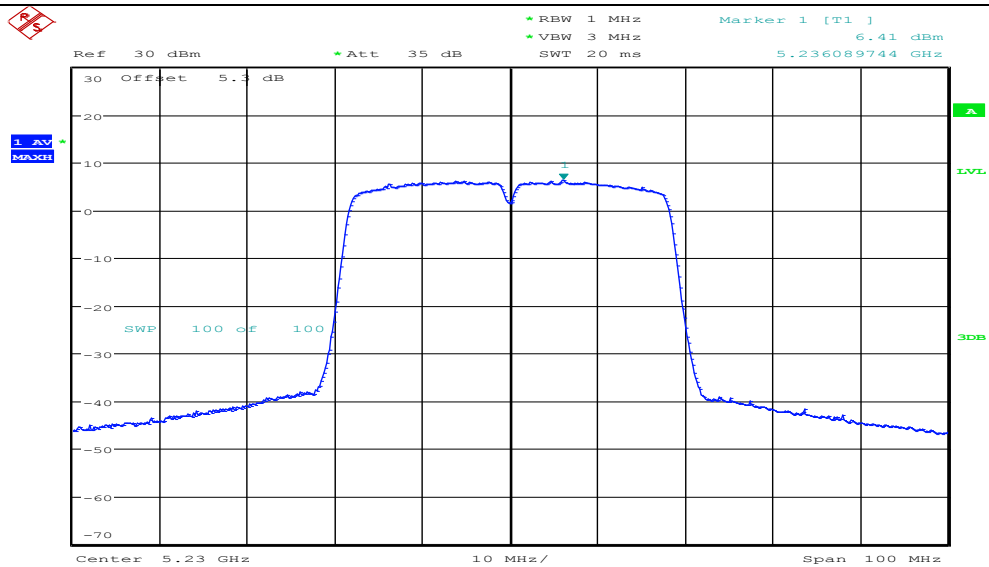
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11N40MIMO_ANT2_5190



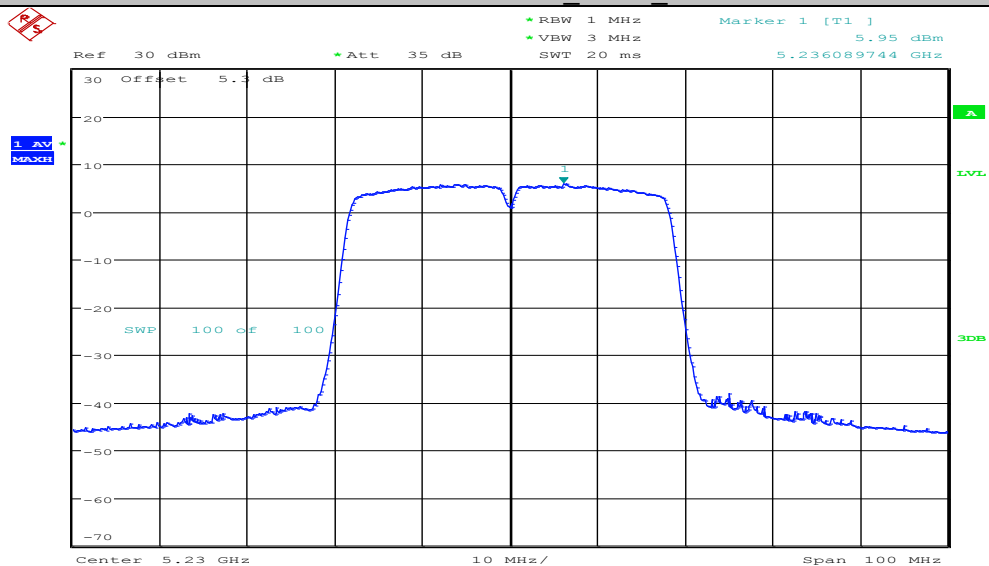
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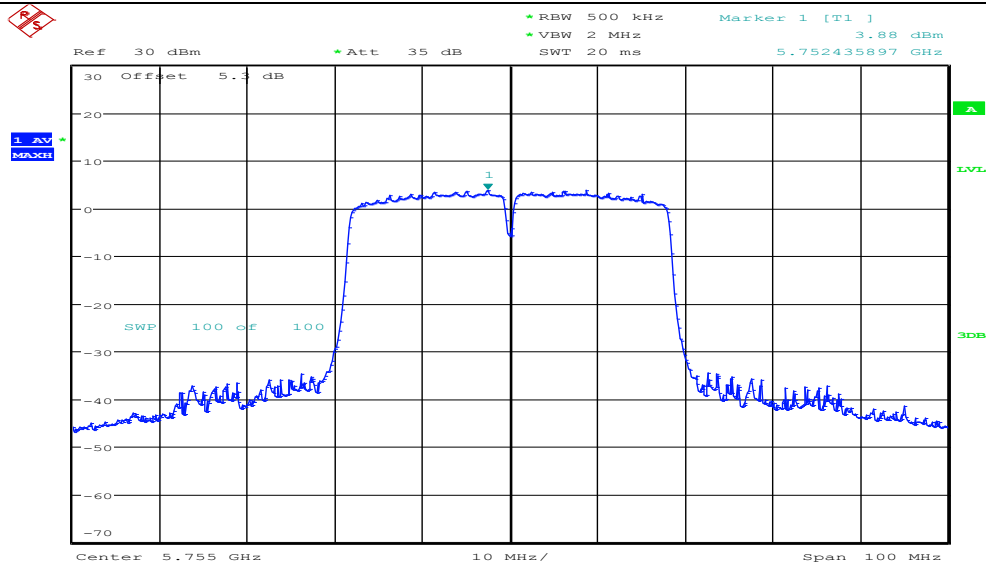
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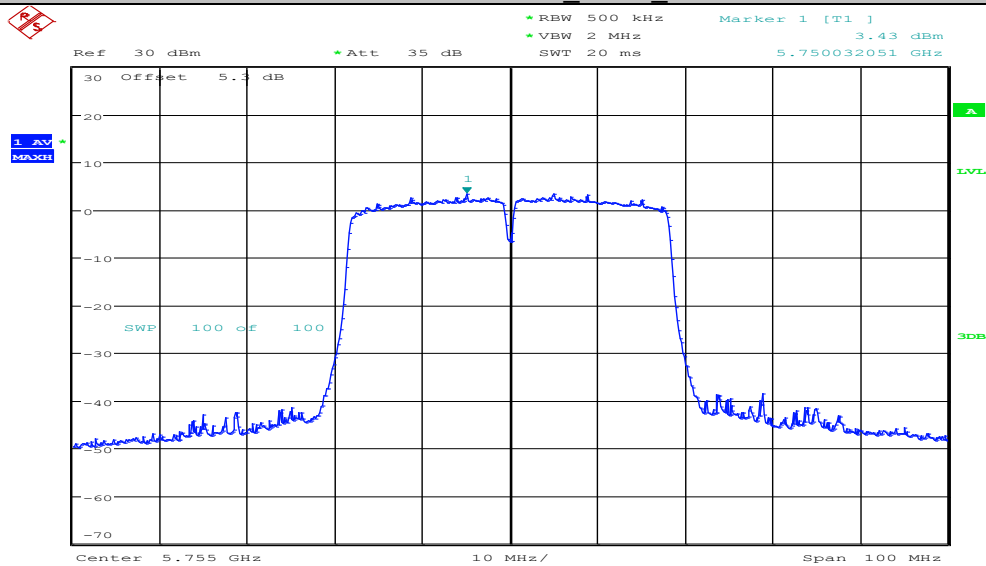
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11N40MIMO ANT1 5755



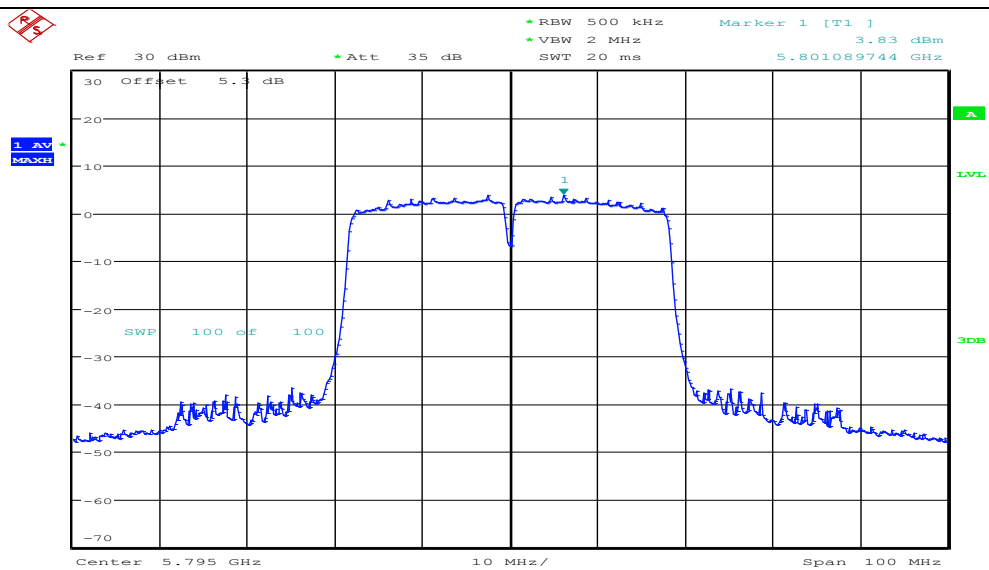
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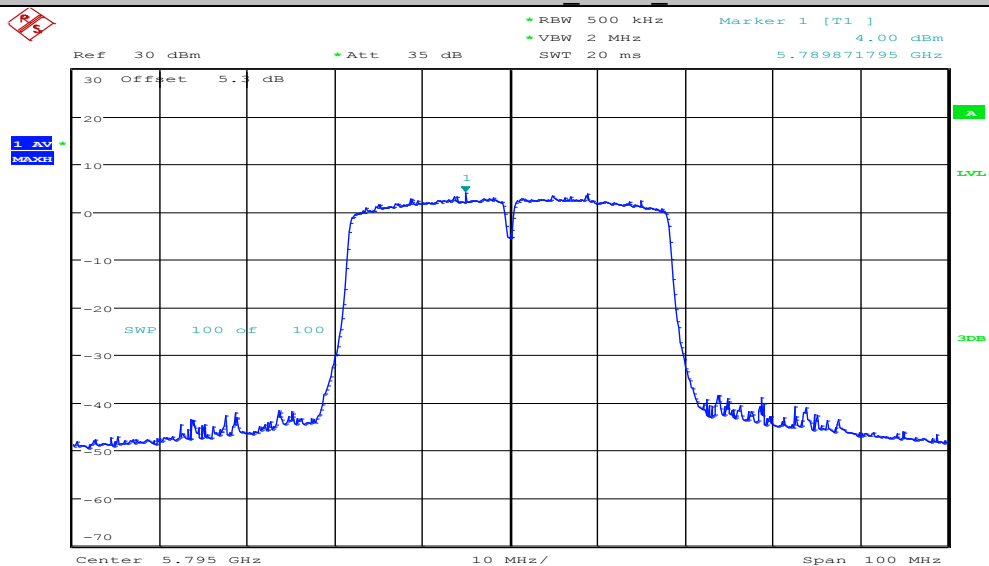
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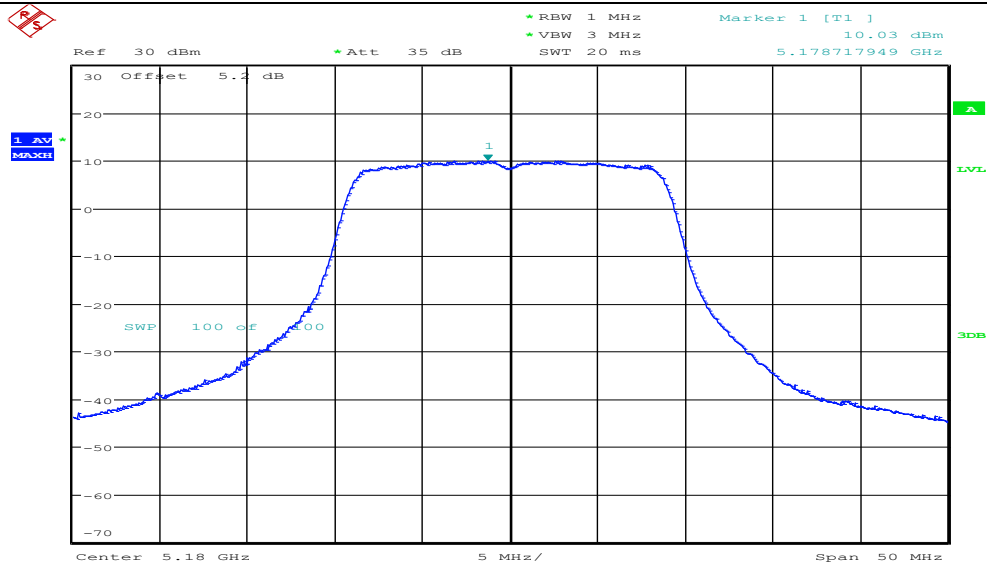
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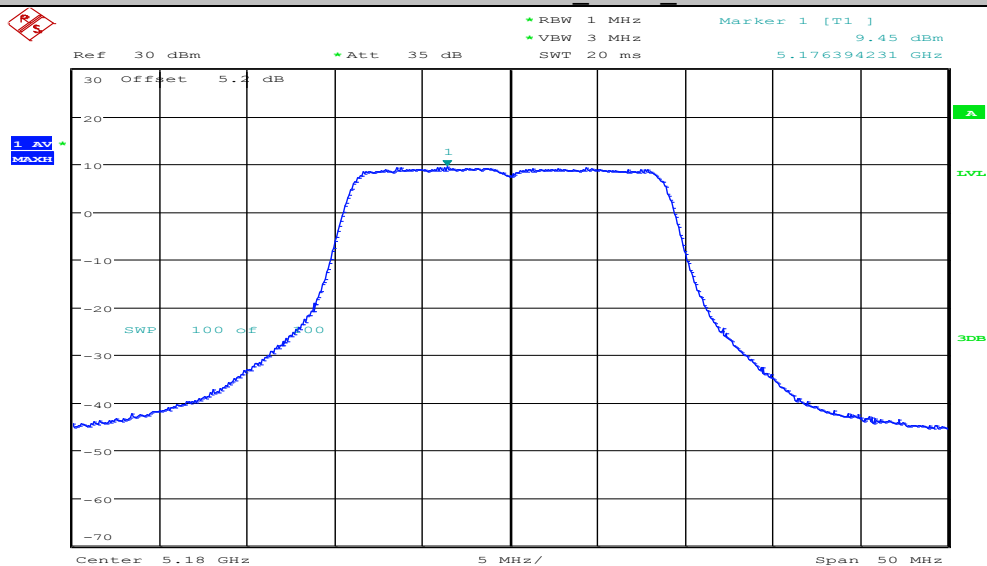
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11AC20MIMO_ANT1_5180



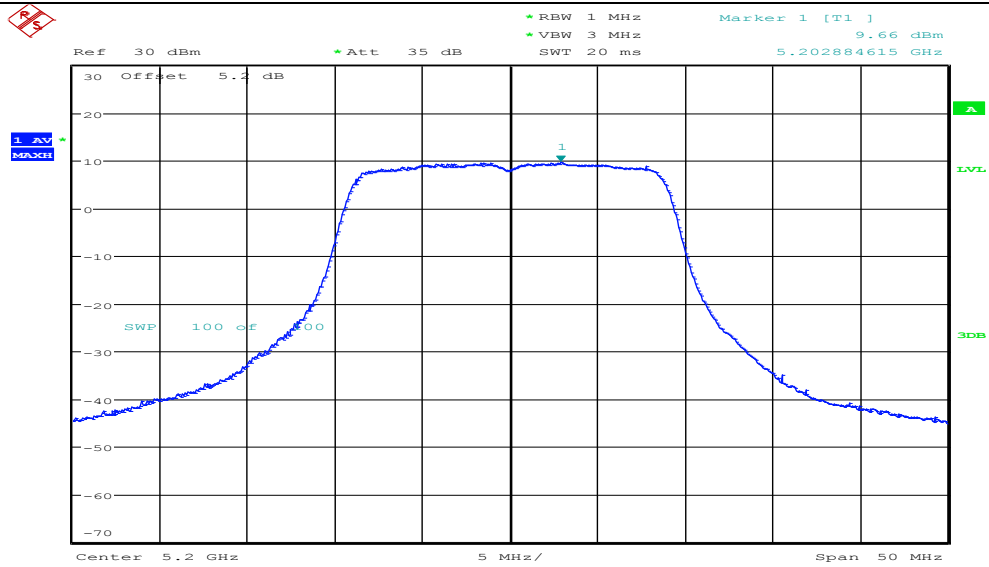
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11AC20MIMO_ANT2_5180



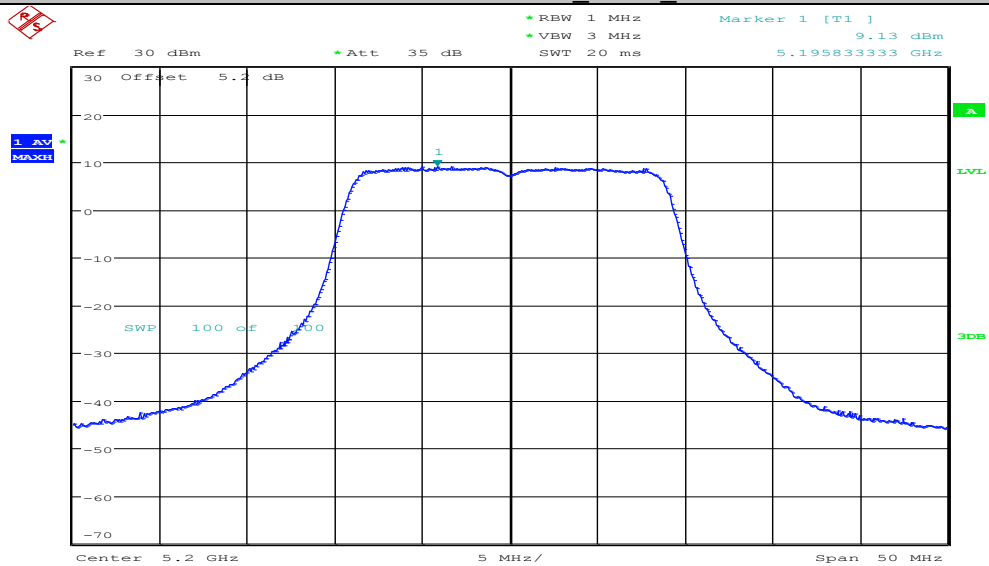
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11AC20MIMO_ANT1_5200



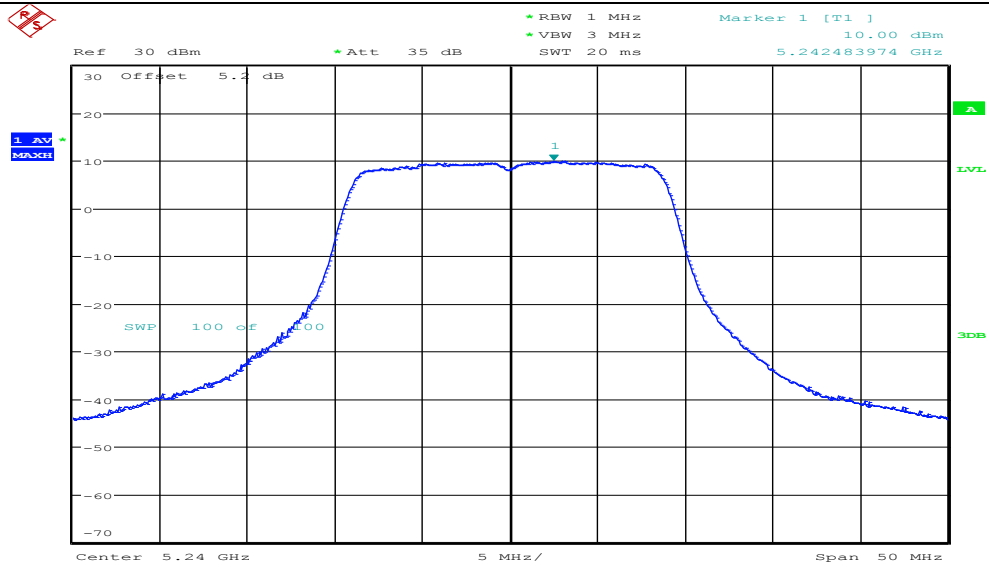
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11AC20MIMO_ANT2_5200



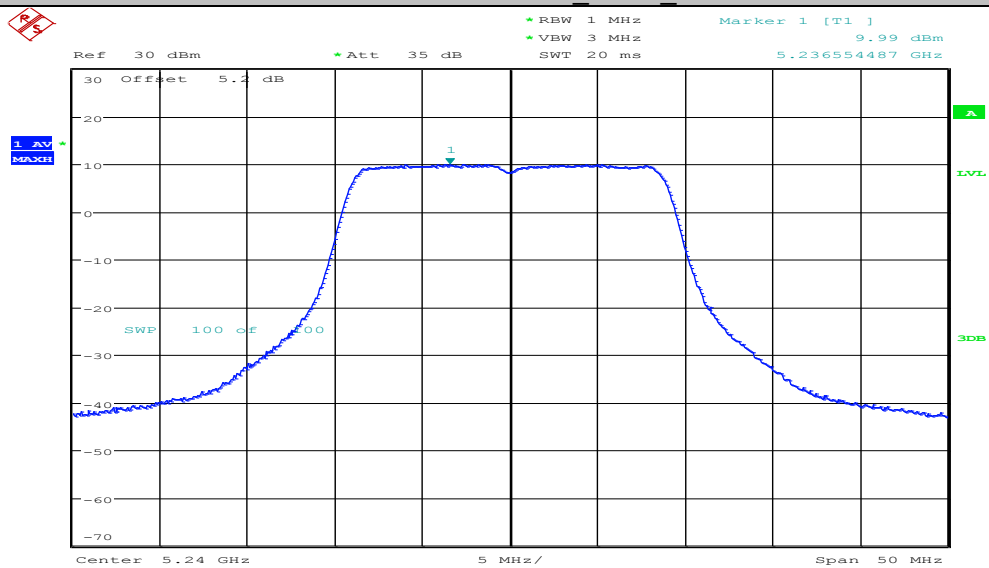
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11AC20MIMO_ANT1_5240



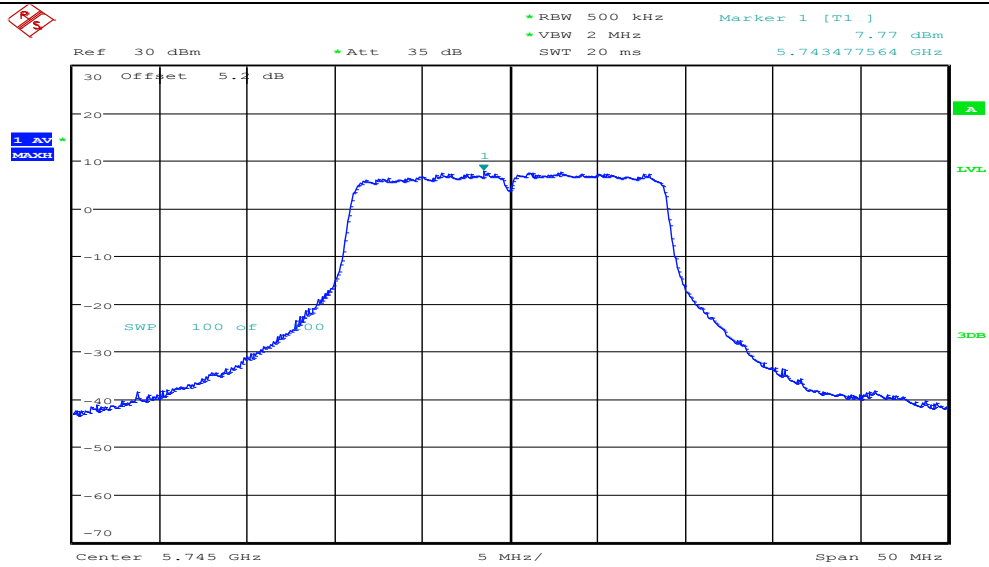
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11AC20MIMO_ANT2_5240



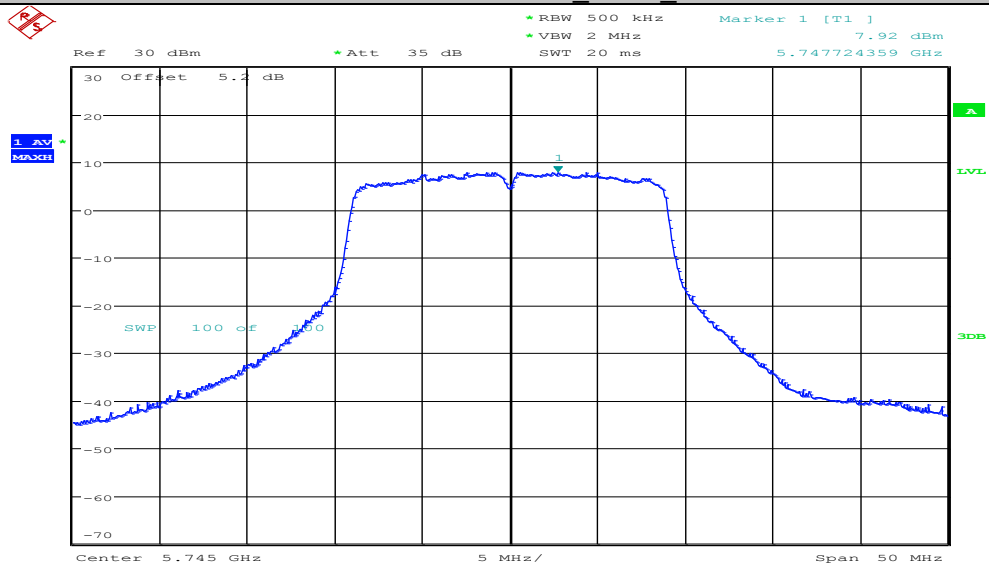
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11AC20MIMO_ANT1_5745



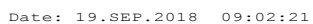
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11AC20MIMO_ANT2_5745



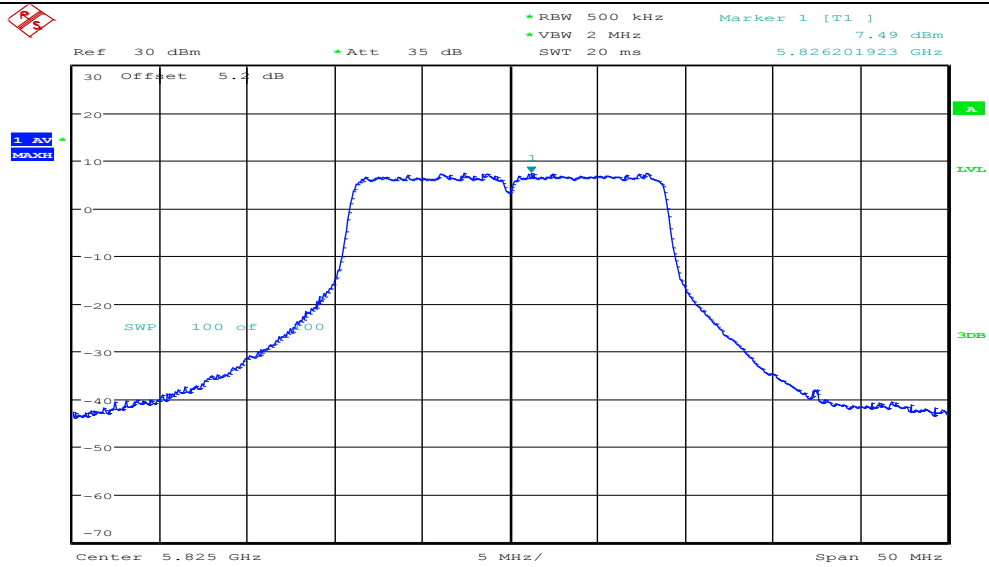
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11AC20MIMO_ANT1_5785



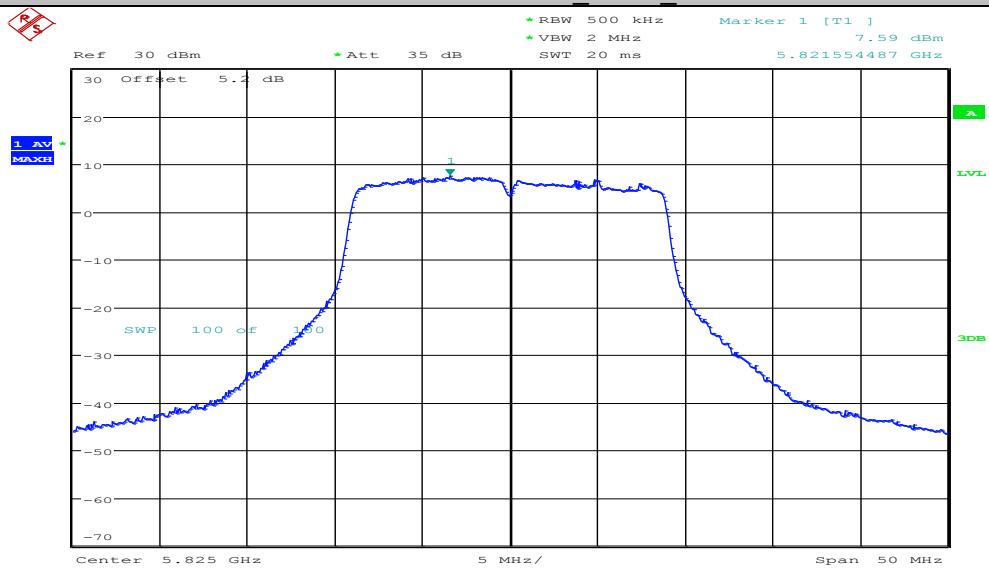
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11AC20MIMO ANT1 5825



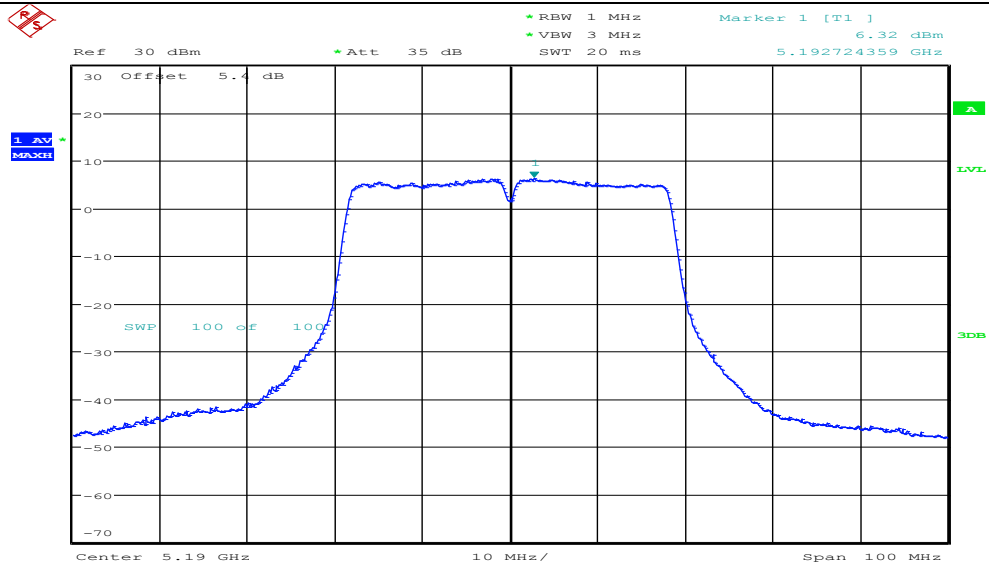
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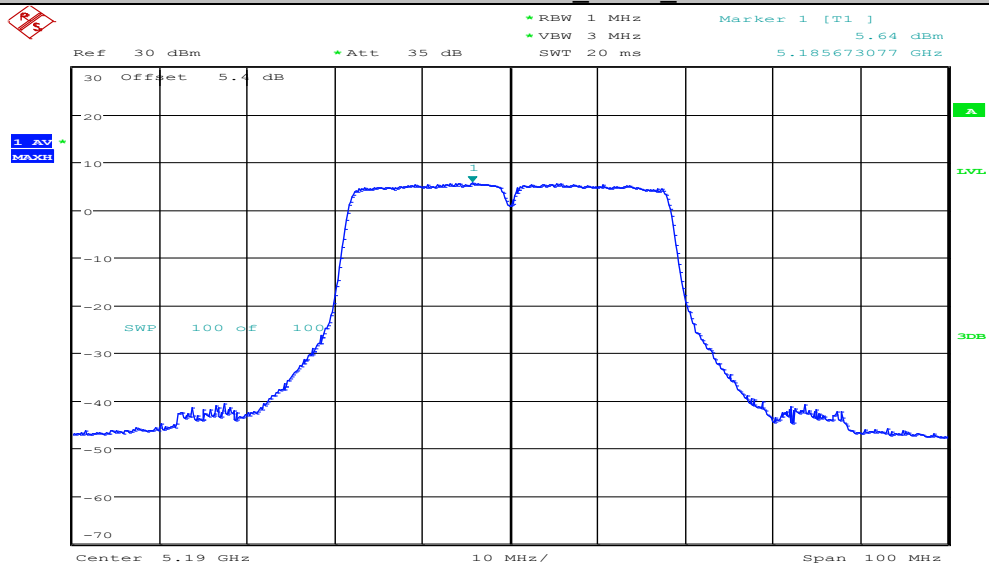
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11AC40MIMO_ANT1_5190



Date: 19.SEP.2018 10:15:45

11AC40MIMO ANT2 5190



Date: 19.SEP.2018 14:30:56

11AC40MIMO ANT1 5230



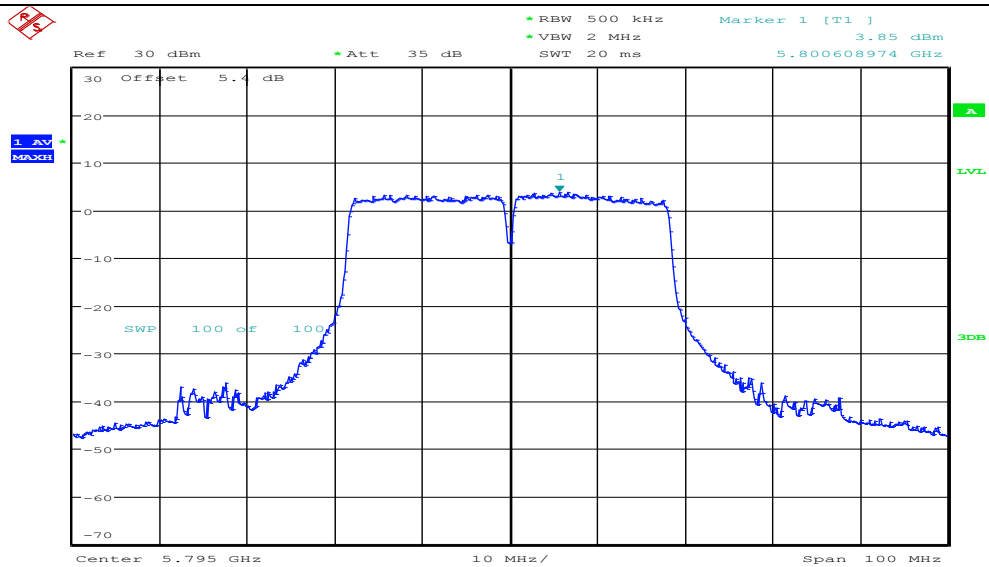
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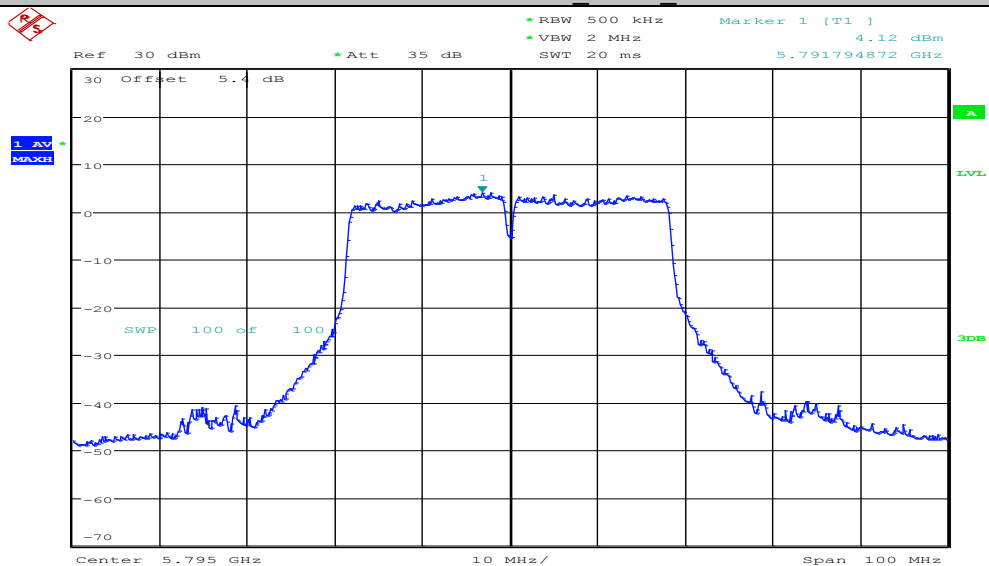
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11AC40MIMO ANT1 5795



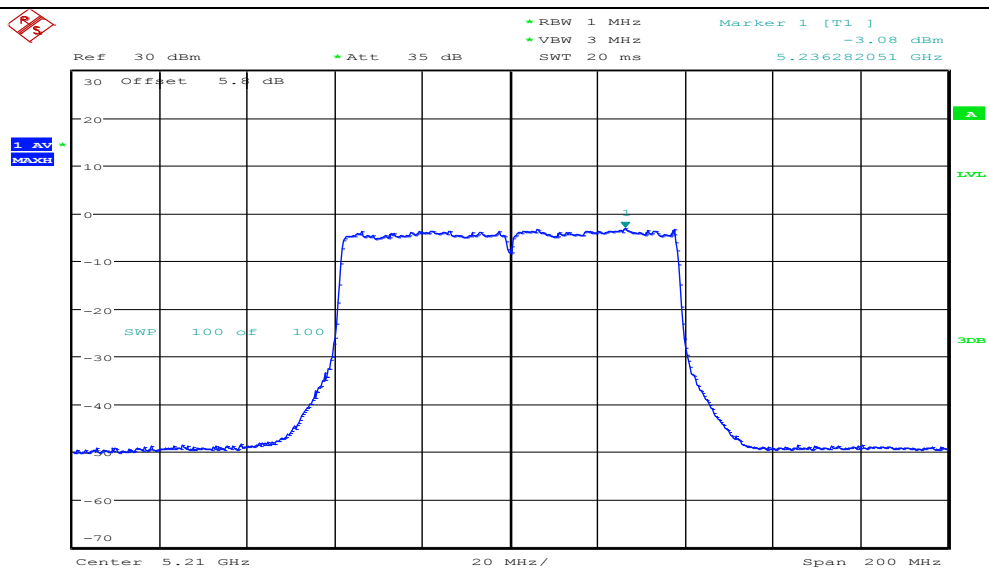
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11AC40MIMO_ANT2_5795



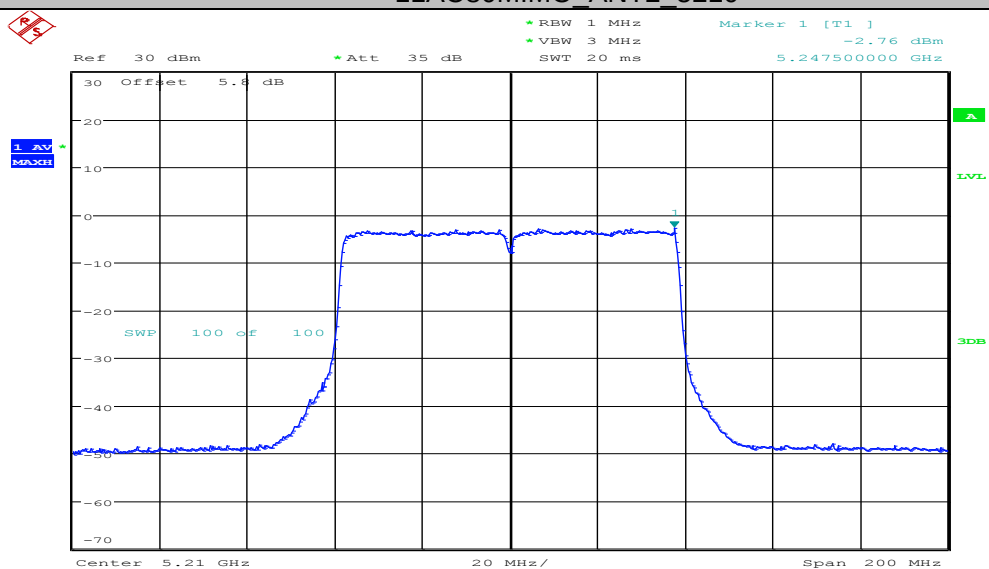
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11AC80MIMO ANT1 5210



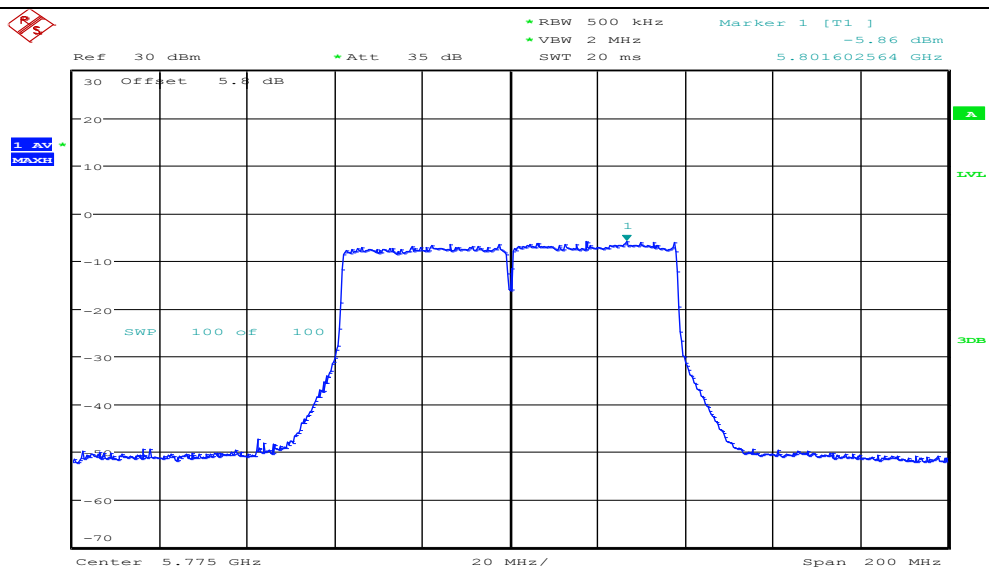
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11AC80MIMO ANT2 5210



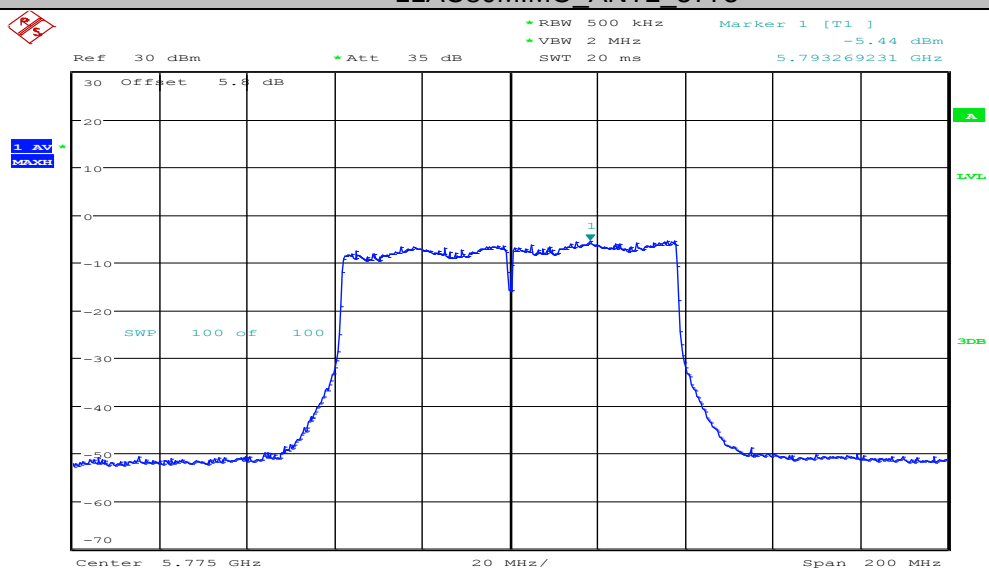
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11AC80MIMO ANT1 5775



Date: 19.SEP.2018 10:26:35

11AC80MIMO ANT2 5775



Date: 19.SEP.2018 14:39:22

7. Frequency Stability Measurement

7.1. Limit of Frequency Stability

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

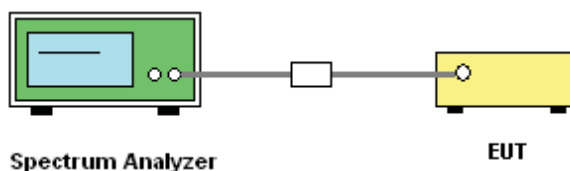
7.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

7.3. Test Procedures

- (1) To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
- (2) The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10dB lower than the measured peak value.
- (3) The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

7.4. Test Setup



7.5. Test Result

Voltage								
Test Mode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	ANT1	5180	NV	NT	-70800	-13.667954	20	PASS
11A	ANT1	5180	LV	NT	-70800	-13.667954	20	PASS
11A	ANT1	5180	HV	NT	-70800	-13.667954	20	PASS
11A	ANT2	5180	NV	NT	-69800	-13.474903	20	PASS
11A	ANT2	5180	LV	NT	-69800	-13.474903	20	PASS
11A	ANT2	5180	HV	NT	-69800	-13.474903	20	PASS
11A	ANT1	5190	NV	NT	-68400	-13.179191	20	PASS
11A	ANT1	5190	LV	NT	-68800	-13.256262	20	PASS
11A	ANT1	5190	HV	NT	-69000	-13.294798	20	PASS
11A	ANT2	5190	NV	NT	-67800	-13.063584	20	PASS
11A	ANT2	5190	LV	NT	-68200	-13.140655	20	PASS

11A	ANT2	5190	HV	NT	-68200	-13.140655	20	PASS
11A	ANT1	5200	NV	NT	-70400	-13.538462	20	PASS
11A	ANT1	5200	LV	NT	-70400	-13.538462	20	PASS
11A	ANT1	5200	HV	NT	-70400	-13.538462	20	PASS
11A	ANT2	5200	NV	NT	-69800	-13.423077	20	PASS
11A	ANT2	5200	LV	NT	-69800	-13.423077	20	PASS
11A	ANT2	5200	HV	NT	-69800	-13.423077	20	PASS
11A	ANT1	5210	NV	NT	-66400	-12.744722	20	PASS
11A	ANT1	5210	LV	NT	-66600	-12.783109	20	PASS
11A	ANT1	5210	HV	NT	-66800	-12.821497	20	PASS
11A	ANT2	5210	NV	NT	-67600	-12.975048	20	PASS
11A	ANT2	5210	LV	NT	-67800	-13.013436	20	PASS
11A	ANT2	5210	HV	NT	-67800	-13.013436	20	PASS
11A	ANT1	5230	NV	NT	-70200	-13.422562	20	PASS
11A	ANT1	5230	LV	NT	-70200	-13.422562	20	PASS
11A	ANT1	5230	HV	NT	-70200	-13.422562	20	PASS
11A	ANT2	5230	NV	NT	-69800	-13.34608	20	PASS
11A	ANT2	5230	LV	NT	-69800	-13.34608	20	PASS
11A	ANT2	5230	HV	NT	-69800	-13.34608	20	PASS
11A	ANT1	5240	NV	NT	-70600	-13.473282	20	PASS
11A	ANT1	5240	LV	NT	-70600	-13.473282	20	PASS
11A	ANT1	5240	HV	NT	-70600	-13.473282	20	PASS
11A	ANT2	5240	NV	NT	-70000	-13.358779	20	PASS
11A	ANT2	5240	LV	NT	-70000	-13.358779	20	PASS
11A	ANT2	5240	HV	NT	-70000	-13.358779	20	PASS
11A	ANT1	5745	NV	NT	-76400	-13.29852	20	PASS
11A	ANT1	5745	LV	NT	-76600	-13.333333	20	PASS
11A	ANT1	5745	HV	NT	-76600	-13.333333	20	PASS
11A	ANT2	5745	NV	NT	-76200	-13.263708	20	PASS
11A	ANT2	5745	LV	NT	-76400	-13.29852	20	PASS
11A	ANT2	5745	HV	NT	-76400	-13.29852	20	PASS
11A	ANT1	5755	NV	NT	-76800	-13.344917	20	PASS
11A	ANT1	5755	LV	NT	-77000	-13.37967	20	PASS
11A	ANT1	5755	HV	NT	-77000	-13.37967	20	PASS
11A	ANT2	5755	NV	NT	-76800	-13.344917	20	PASS
11A	ANT2	5755	LV	NT	-77000	-13.37967	20	PASS
11A	ANT2	5755	HV	NT	-77000	-13.37967	20	PASS
11A	ANT1	5775	NV	NT	-75800	-13.125541	20	PASS
11A	ANT1	5775	LV	NT	-76200	-13.194805	20	PASS

11A	ANT1	5775	HV	NT	-76200	-13.194805	20	PASS
11A	ANT2	5775	NV	NT	-75000	-12.987013	20	PASS
11A	ANT2	5775	LV	NT	-75200	-13.021645	20	PASS
11A	ANT2	5775	HV	NT	-75400	-13.056277	20	PASS
11A	ANT1	5785	NV	NT	-76000	-13.137424	20	PASS
11A	ANT1	5785	LV	NT	-76200	-13.171997	20	PASS
11A	ANT1	5785	HV	NT	-76200	-13.171997	20	PASS
11A	ANT2	5785	NV	NT	-76000	-13.137424	20	PASS
11A	ANT2	5785	LV	NT	-76000	-13.137424	20	PASS
11A	ANT2	5785	HV	NT	-76000	-13.137424	20	PASS
11A	ANT1	5795	NV	NT	-75000	-12.942192	20	PASS
11A	ANT1	5795	LV	NT	-75000	-12.942192	20	PASS
11A	ANT1	5795	HV	NT	-75000	-12.942192	20	PASS
11A	ANT2	5795	NV	NT	-75800	-13.080242	20	PASS
11A	ANT2	5795	LV	NT	-76000	-13.114754	20	PASS
11A	ANT2	5795	HV	NT	-76000	-13.114754	20	PASS
11A	ANT1	5825	NV	NT	-76600	-13.150215	20	PASS
11A	ANT1	5825	LV	NT	-76800	-13.184549	20	PASS
11A	ANT1	5825	HV	NT	-76800	-13.184549	20	PASS
11A	ANT2	5825	NV	NT	-76200	-13.081545	20	PASS
11A	ANT2	5825	LV	NT	-76400	-13.11588	20	PASS
11A	ANT2	5825	HV	NT	-76400	-13.11588	20	PASS

Temperature								
Test Mode	Antenna	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
11A	ANT1	5180	NV	-30	-70600	-13.629344	20	PASS
11A	ANT1	5180	NV	-20	-70600	-13.629344	20	PASS
11A	ANT1	5180	NV	-10	-70600	-13.629344	20	PASS
11A	ANT1	5180	NV	0	-70400	-13.590734	20	PASS
11A	ANT1	5180	NV	10	-70400	-13.590734	20	PASS
11A	ANT1	5180	NV	20	-70400	-13.590734	20	PASS
11A	ANT1	5180	NV	30	-70400	-13.590734	20	PASS
11A	ANT1	5180	NV	40	-70400	-13.590734	20	PASS
11A	ANT1	5180	NV	50	-70200	-13.552124	20	PASS
11A	ANT2	5180	NV	-30	-69800	-13.474903	20	PASS
11A	ANT2	5180	NV	-20	-69800	-13.474903	20	PASS
11A	ANT2	5180	NV	-10	-69800	-13.474903	20	PASS
11A	ANT2	5180	NV	0	-69800	-13.474903	20	PASS

11A	ANT2	5180	NV	10	-69800	-13.474903	20	PASS
11A	ANT2	5180	NV	20	-69800	-13.474903	20	PASS
11A	ANT2	5180	NV	30	-69600	-13.436293	20	PASS
11A	ANT2	5180	NV	40	-69800	-13.474903	20	PASS
11A	ANT2	5180	NV	50	-69600	-13.436293	20	PASS
11A	ANT1	5190	NV	-30	-69000	-13.294798	20	PASS
11A	ANT1	5190	NV	-20	-69000	-13.294798	20	PASS
11A	ANT1	5190	NV	-10	-69000	-13.294798	20	PASS
11A	ANT1	5190	NV	0	-69000	-13.294798	20	PASS
11A	ANT1	5190	NV	10	-69000	-13.294798	20	PASS
11A	ANT1	5190	NV	20	-69200	-13.333333	20	PASS
11A	ANT1	5190	NV	30	-69200	-13.333333	20	PASS
11A	ANT1	5190	NV	40	-69200	-13.333333	20	PASS
11A	ANT1	5190	NV	50	-69200	-13.333333	20	PASS
11A	ANT2	5190	NV	-30	-68400	-13.179191	20	PASS
11A	ANT2	5190	NV	-20	-68600	-13.217726	20	PASS
11A	ANT2	5190	NV	-10	-68600	-13.217726	20	PASS
11A	ANT2	5190	NV	0	-68800	-13.256262	20	PASS
11A	ANT2	5190	NV	10	-69000	-13.294798	20	PASS
11A	ANT2	5190	NV	20	-69000	-13.294798	20	PASS
11A	ANT2	5190	NV	30	-69000	-13.294798	20	PASS
11A	ANT2	5190	NV	40	-69000	-13.294798	20	PASS
11A	ANT2	5190	NV	50	-69000	-13.294798	20	PASS
11A	ANT1	5200	NV	-30	-70400	-13.538462	20	PASS
11A	ANT1	5200	NV	-20	-70400	-13.538462	20	PASS
11A	ANT1	5200	NV	-10	-70400	-13.538462	20	PASS
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11A	ANT1	5200	NV	50	-70200	-13.5	20	PASS
11A	ANT2	5200	NV	-30	-69800	-13.423077	20	PASS
11A	ANT2	5200	NV	-20	-69800	-13.423077	20	PASS
11A	ANT2	5200	NV	-10	-69800	-13.423077	20	PASS
11A	ANT2	5200	NV	0	-69800	-13.423077	20	PASS
11A	ANT2	5200	NV	10	-69600	-13.384615	20	PASS
11A	ANT2	5200	NV	20	-69600	-13.384615	20	PASS
11A	ANT2	5200	NV	30	-69600	-13.384615	20	PASS

11A	ANT2	5200	NV	40	-69600	-13.384615	20	PASS
11A	ANT2	5200	NV	50	-69600	-13.384615	20	PASS
11A	ANT1	5210	NV	-30	-67000	-12.859885	20	PASS
11A	ANT1	5210	NV	-20	-67000	-12.859885	20	PASS
11A	ANT1	5210	NV	-10	-67000	-12.859885	20	PASS
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11A	ANT1	5210	NV	10	-67000	-12.859885	20	PASS
11A	ANT1	5210	NV	20	-67200	-12.898273	20	PASS
11A	ANT1	5210	NV	30	-67200	-12.898273	20	PASS
11A	ANT1	5210	NV	40	-67200	-12.898273	20	PASS
11A	ANT1	5210	NV	50	-67200	-12.898273	20	PASS
11A	ANT2	5210	NV	-30	-67800	-13.013436	20	PASS
11A	ANT2	5210	NV	-20	-67800	-13.013436	20	PASS
11A	ANT2	5210	NV	-10	-67800	-13.013436	20	PASS
11A	ANT2	5210	NV	0	-67800	-13.013436	20	PASS
11A	ANT2	5210	NV	10	-67800	-13.013436	20	PASS
11A	ANT2	5210	NV	20	-67600	-12.975048	20	PASS
11A	ANT2	5210	NV	30	-67600	-12.975048	20	PASS
11A	ANT2	5210	NV	40	-67600	-12.975048	20	PASS
11A	ANT2	5210	NV	50	-67600	-12.975048	20	PASS
11A	ANT1	5230	NV	-30	-70200	-13.422562	20	PASS
11A	ANT1	5230	NV	-20	-70200	-13.422562	20	PASS
11A	ANT1	5230	NV	-10	-70200	-13.422562	20	PASS
11A	ANT1	5230	NV	0	-70000	-13.384321	20	PASS
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11A	ANT1	5230	NV	20	-70000	-13.384321	20	PASS
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11A	ANT2	5230	NV	40	-69600	-13.307839	20	PASS
11A	ANT2	5230	NV	50	-69600	-13.307839	20	PASS
11A	ANT1	5240	NV	-30	-70600	-13.473282	20	PASS

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11A	ANT1	5240	NV	50	-70200	-13.396947	20	PASS
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11A	ANT2	5240	NV	40	-69800	-13.320611	20	PASS
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11A	ANT1	5745	NV	-10	-76200	-13.263708	20	PASS
11A	ANT1	5745	NV	0	-76000	-13.228895	20	PASS
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11A	ANT1	5745	NV	20	-75800	-13.194082	20	PASS
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11A	ANT1	5745	NV	40	-75600	-13.159269	20	PASS
11A	ANT1	5745	NV	50	-75600	-13.159269	20	PASS
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11A	ANT2	5745	NV	40	-75800	-13.194082	20	PASS
11A	ANT2	5745	NV	50	-75600	-13.159269	20	PASS
11A	ANT1	5755	NV	-30	-76800	-13.344917	20	PASS
11A	ANT1	5755	NV	-20	-76600	-13.310165	20	PASS
11A	ANT1	5755	NV	-10	-76600	-13.310165	20	PASS
11A	ANT1	5755	NV	0	-76400	-13.275413	20	PASS

11A	ANT1	5755	NV	10	-76200	-13.24066	20	PASS
11A	ANT1	5755	NV	20	-76200	-13.24066	20	PASS
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11A	ANT1	5755	NV	50	-75800	-13.171156	20	PASS
11A	ANT2	5755	NV	-30	-77000	-13.37967	20	PASS
11A	ANT2	5755	NV	-20	-77000	-13.37967	20	PASS
11A	ANT2	5755	NV	-10	-77000	-13.37967	20	PASS
11A	ANT2	5755	NV	0	-76800	-13.344917	20	PASS
11A	ANT2	5755	NV	10	-76800	-13.344917	20	PASS
11A	ANT2	5755	NV	20	-76600	-13.310165	20	PASS
11A	ANT2	5755	NV	30	-76600	-13.310165	20	PASS
11A	ANT2	5755	NV	40	-76400	-13.275413	20	PASS
11A	ANT2	5755	NV	50	-76400	-13.275413	20	PASS
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11A	ANT1	5775	NV	20	-76200	-13.194805	20	PASS
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11A	ANT1	5785	NV	10	-76000	-13.137424	20	PASS
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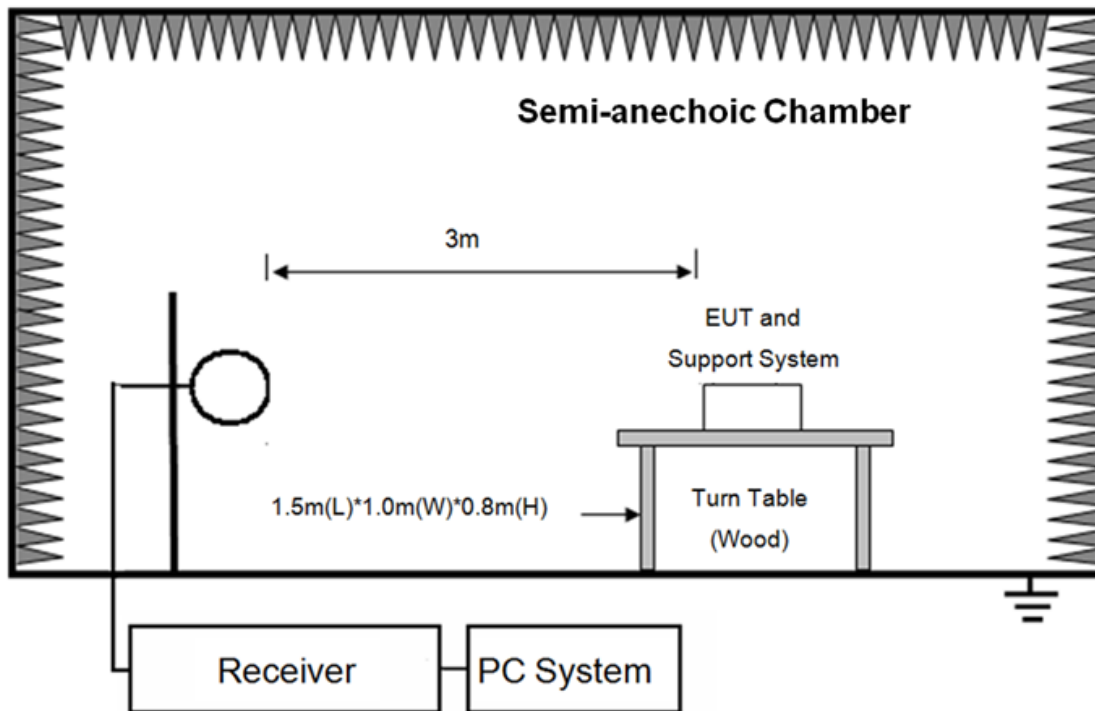
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11A	ANT2	5785	NV	-20	-76000	-13.137424	20	PASS
11A	ANT2	5785	NV	-10	-75800	-13.102852	20	PASS
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11A	ANT2	5785	NV	10	-75800	-13.102852	20	PASS
11A	ANT2	5785	NV	20	-75800	-13.102852	20	PASS
11A	ANT2	5785	NV	30	-75600	-13.06828	20	PASS
11A	ANT2	5785	NV	40	-75600	-13.06828	20	PASS
11A	ANT2	5785	NV	50	-75600	-13.06828	20	PASS
11A	ANT1	5795	NV	-30	-75000	-12.942192	20	PASS
11A	ANT1	5795	NV	-20	-74800	-12.907679	20	PASS
11A	ANT1	5795	NV	-10	-74800	-12.907679	20	PASS
11A	ANT1	5795	NV	0	-74800	-12.907679	20	PASS
11A	ANT1	5795	NV	10	-74800	-12.907679	20	PASS
11A	ANT1	5795	NV	20	-74600	-12.873167	20	PASS
11A	ANT1	5795	NV	30	-74600	-12.873167	20	PASS
11A	ANT1	5795	NV	40	-74400	-12.838654	20	PASS
11A	ANT1	5795	NV	50	-74400	-12.838654	20	PASS
11A	ANT2	5795	NV	-30	-76000	-13.114754	20	PASS
11A	ANT2	5795	NV	-20	-76000	-13.114754	20	PASS
11A	ANT2	5795	NV	-10	-76000	-13.114754	20	PASS
11A	ANT2	5795	NV	0	-76000	-13.114754	20	PASS
11A	ANT2	5795	NV	10	-75800	-13.080242	20	PASS
11A	ANT2	5795	NV	20	-75800	-13.080242	20	PASS
11A	ANT2	5795	NV	30	-75800	-13.080242	20	PASS
11A	ANT2	5795	NV	40	-75600	-13.045729	20	PASS
11A	ANT2	5795	NV	50	-75600	-13.045729	20	PASS
11A	ANT1	5825	NV	-30	-76800	-13.184549	20	PASS
11A	ANT1	5825	NV	-20	-76800	-13.184549	20	PASS
11A	ANT1	5825	NV	-10	-76800	-13.184549	20	PASS
11A	ANT1	5825	NV	0	-76800	-13.184549	20	PASS
11A	ANT1	5825	NV	10	-76800	-13.184549	20	PASS
11A	ANT1	5825	NV	20	-76800	-13.184549	20	PASS
11A	ANT1	5825	NV	30	-76800	-13.184549	20	PASS
11A	ANT1	5825	NV	40	-76600	-13.150215	20	PASS
11A	ANT1	5825	NV	50	-76800	-13.184549	20	PASS
11A	ANT2	5825	NV	-30	-76400	-13.11588	20	PASS

11A	ANT2	5825	NV	-20	-76200	-13.081545	20	PASS
11A	ANT2	5825	NV	-10	-76200	-13.081545	20	PASS
11A	ANT2	5825	NV	0	-76200	-13.081545	20	PASS
11A	ANT2	5825	NV	10	-76200	-13.081545	20	PASS
11A	ANT2	5825	NV	20	-76200	-13.081545	20	PASS
11A	ANT2	5825	NV	30	-76000	-13.04721	20	PASS
11A	ANT2	5825	NV	40	-76000	-13.04721	20	PASS
11A	ANT2	5825	NV	50	-76000	-13.04721	20	PASS

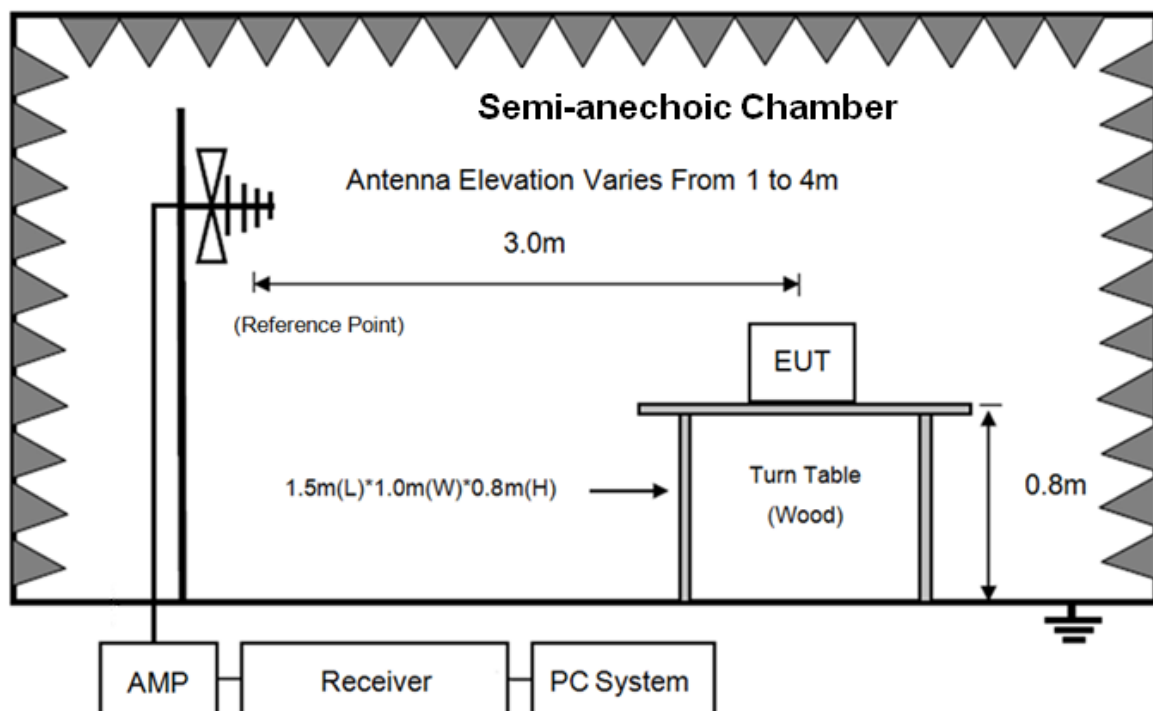
8. Emissions in restricted frequency bands

8.1. Block diagram of test setup

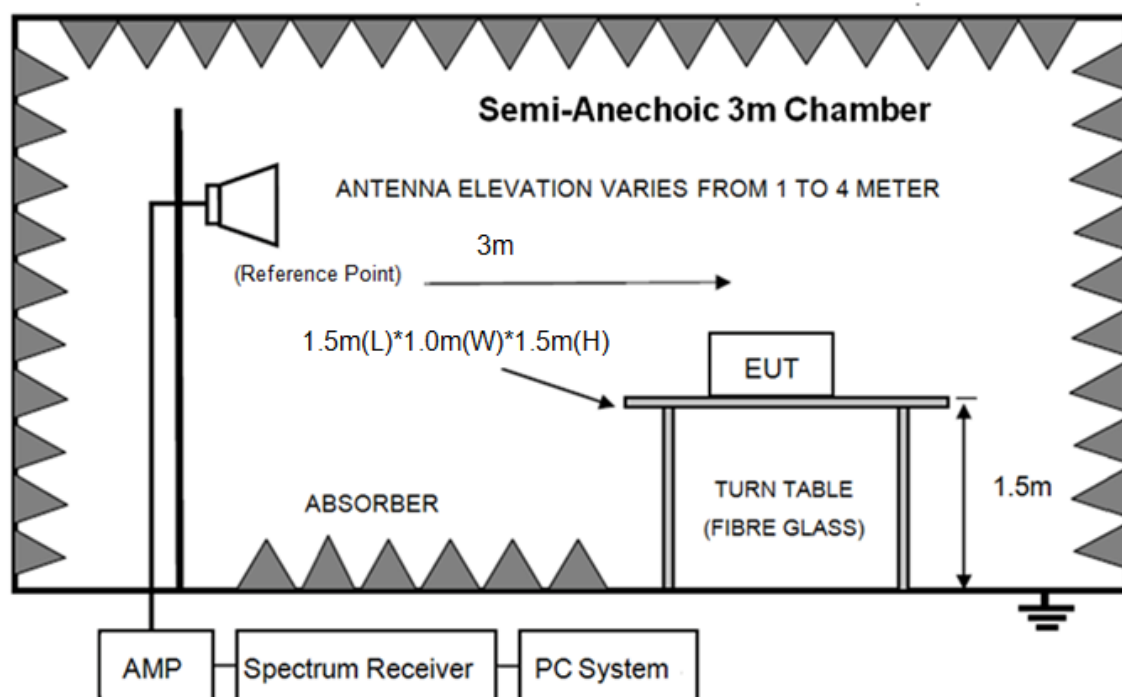
In 3m Anechoic Chamber Test Setup Diagram for 9kHz-30MHz



In 3m Anechoic Chamber Test Setup Diagram for 30MHz-1GHz



In 3m Anechoic Chamber Test Setup Diagram for frequency above 1GHz



Note: For harmonic emissions test a appropriate high pass filter was inserted in the input port of AMP.

8.2. Limit

8.3.1 FCC 15.205 Restricted frequency band

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.1772&4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.2072&4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.G
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(²)
13.36-13.41			

8.3.2 FCC 15.209 Limit.

FREQUENCY MHz	DISTANCE Meters	FIELD STRENGTHS LIMIT	
		$\mu\text{V/m}$	$\text{dB}(\mu\text{V})/\text{m}$
0.009 ~ 0.490	300	$2400/F(\text{kHz})$	$67.6-20\log(F)$
0.490 ~ 1.705	30	$24000/F(\text{kHz})$	$87.6-20\log(F)$
1.705 ~ 30.0	30	30	29.54
30 ~ 88	3	100	40.0
88 ~ 216	3	150	43.5
216 ~ 960	3	200	46.0
960 ~ 1000	3	500	54.0
Above 1000	3	74.0 $\text{dB}(\mu\text{V})/\text{m}$ (Peak) 54.0 $\text{dB}(\mu\text{V})/\text{m}$ (Average)	

Note: (1) The emission limits shown in the above table are based on measurements employing a CISPR QP detector except for the frequency bands 9-90kHz, 110-490kHz and above 1000MHz. Radiated emissions limits in these three bands are based on measurements employing an average detector.

(2) At frequencies below 30MHz, measurement may be performed at a distance closer than that specified, and the limit at closer measurement distance can be extrapolated by below formula:

$$\text{Limit}_{3\text{m}}(\text{dB}\mu\text{V}/\text{m}) = \text{Limit}_{30\text{m}}(\text{dB}\mu\text{V}/\text{m}) + 40\log(30\text{m}/3\text{m})$$

8.3.3 Limit for this EUT

All the emissions appearing within 15.205 restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions shall be at least 20dB below the fundamental emissions, or comply with 15.209 limits.

8.3. Test Procedure

- (1) EUT height should be 0.8m for below 1GHz at a semi - anechoic chamber while EUT height should be 1.5m for above 1GHz at full chamber or semi - anechoic chamber ground with absorbers
- (2) Setup EUT and assistant system according clause 2.3 and 8.2
- (3) Test antenna was located 3m from the EUT on an adjustable mast, and the antenna used as below table.

Test frequency range	Test antenna used	Test distance
9kHz-30MHz	Active Loop antenna	3m
30MHz-1GHz	Trilog Broadband Antenna	3m
1GHz-18GHz	Double Ridged Horn Antenna(1GHz-18GHz)	3m
18GHz-40GHz	Horn Antenna(18GHz-40GHz)	1m

According ANSI C63.10:2013 clause 6.4.4.2 and 6.5.3, for measurements below 30 MHz, the loop antenna was positioned with its plane vertical from the EUT and rotated about its vertical

axis for maximum response at each azimuth position around the EUT. And the loop antenna also be positioned with its plane horizontal at the specified distance from the EUT. The center of the loop is 1 m above the ground. for measurement above 30MHz, the Trilog Broadband Antenna or Horn Antenna was located 3m from EUT, Measurements were made with the antenna positioned in both the horizontal and vertical planes of Polarization, and the measurement antenna was varied from 1 m to 4 m. in height above the reference ground plane to obtain the maximum signal strength.

(4) Below pre-scan procedure was first performed in order to find prominent frequency spectrum radiated emissions from 9kHz to 40GHz:

(a) Scanning the peak frequency spectrum with the antenna specified in step (3), and the EUT was rotated 360 degree, the antenna height was varied from 1m to 4m(Except loop antenna, it's fixed 1m above ground.)

(b) Change work frequency or channel of device if practicable.

(c) Change modulation type of device if practicable.

(d) Change power supply range from 85% to 115% of the rated supply voltage

(e) Rotated EUT though three orthogonal axes to determine the attitude of EUT arrangement produces highest emissions.

Spectrum frequency from 9kHz to 40GHz (tenth harmonic of fundamental frequency) was investigated, and no any obvious emission were detected from 9kHz to 30MHz and 18GHz to 40GHz, so below final test was performed with frequency range from 30MHz to 18GHz.

(5) For final emissions measurements at each frequency of interest, the EUT was rotated and the antenna height was varied between 1m and 4m in order to maximize the emission. Measurements in both horizontal and vertical polarities were made and the data was recorded. In order to find the maximum emission, the relative positions of equipments and all of the interface cables were changed according to ANSI C63.10 2013 on Radiated Emission test.

(6) The emissions from 9kHz to 1GHz were measured based on CISPR QP detector except for the frequency bands 9-90kHz, 110-490kHz, for emissions from 9kHz-90kHz,110kHz-490kHz and above 1GHz were measured based on average detector, for emissions above 1GHz, peak emissions also be measured and need comply with Peak limit.

(7) The emissions from 9kHz to 1GHz, QP or average values were measured with EMI receiver with below RBW

Frequency band	RBW
9kHz-150kHz	200Hz
150kHz-30MHz	9kHz
30MHz-1GHz	120kHz

(8) For emissions above 1GHz, both Peak and Average level were measured with Spectrum Analyzer, and the RBW is set at 1MHz, VBW is set at 3MHz ,Peak detector for Peak measure , RMS detector for AV value

8.4. Test result

PASS. (See below detailed test result)

All the emissions except fundamental emission from 9kHz to 40GHz were comply with 15.209 limit.

Note1: According exploratory test no any obvious emission were detected from 9kHz to 30MHz and 18GHz to 40GHz, so the final test was performed with frequency range from 30MHz to 18GHz and recorded in below.

Note2: For emissions below 1GHz, according exploratory explorer test, when change Tx mode and channel, have no distinct influence on emissions level, so for emissions below 1GHz, the final test was only performed with EUT working in 11a mode.

Note3: For emissions above 1GHz, 11a ANT1, 11n20, n40, 11ac20, 11ac40,11ac80 mode ANT 1 ANT 2 mode and MIMO mode all have been tested, only 11a ANT 1 mode is the worst case and reported

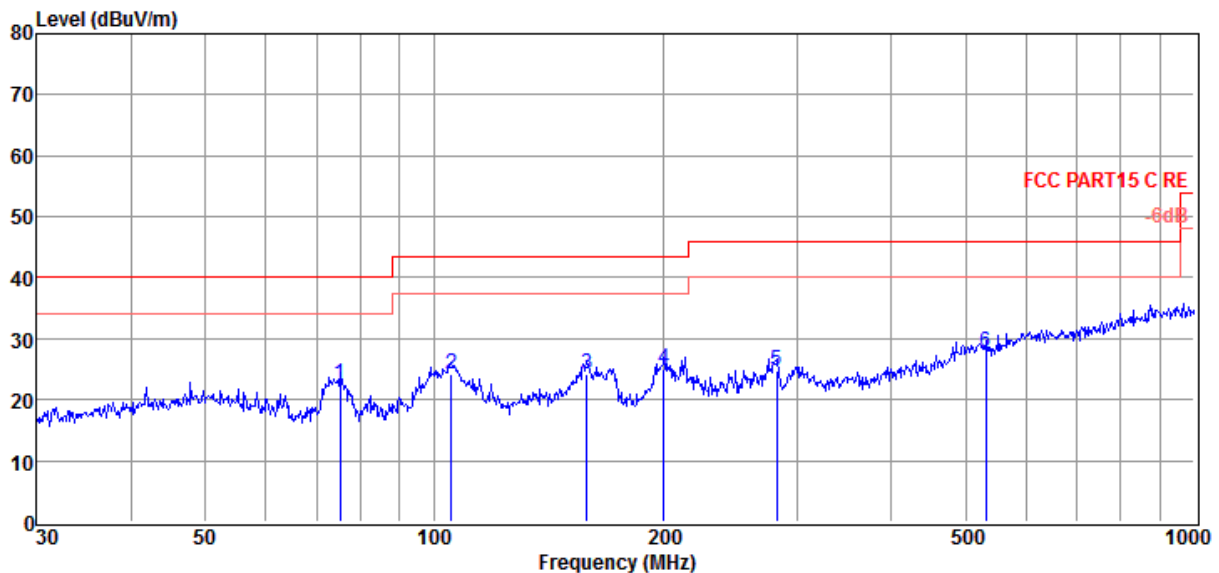
Radiated Emission test (below 1GHz)

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#
Test Date : 2018-08-27
EUT : Outdoor Access Point
Power Supply : DC 48V
Condition : Temp:24.5'C, Humi:55.5%,
 Press:100.1kPa
Memo :

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC
 BELOW1G.EM6
Tested By : Talent
Model Number : WL8200-IT3
Test Mode : Tx mode
Antenna/Distance : 2017 VULB 9163 1#/3m/HORIZONTAL

Data: 7



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	75.18	9.88	8.34	4.22	22.44	40.00	-17.56	QP	HORIZONTAL
2	105.27	8.77	10.85	4.46	24.08	43.50	-19.42	QP	HORIZONTAL
3	158.67	10.99	8.52	4.82	24.33	43.50	-19.17	QP	HORIZONTAL
4	200.69	8.44	11.52	5.02	24.98	43.50	-18.52	QP	HORIZONTAL
5	282.00	6.26	13.03	5.44	24.73	46.00	-21.27	QP	HORIZONTAL
6	531.96	3.78	18.15	5.78	27.71	46.00	-18.29	QP	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC
BELOW1G.EM6

Test Date : 2018-08-27

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

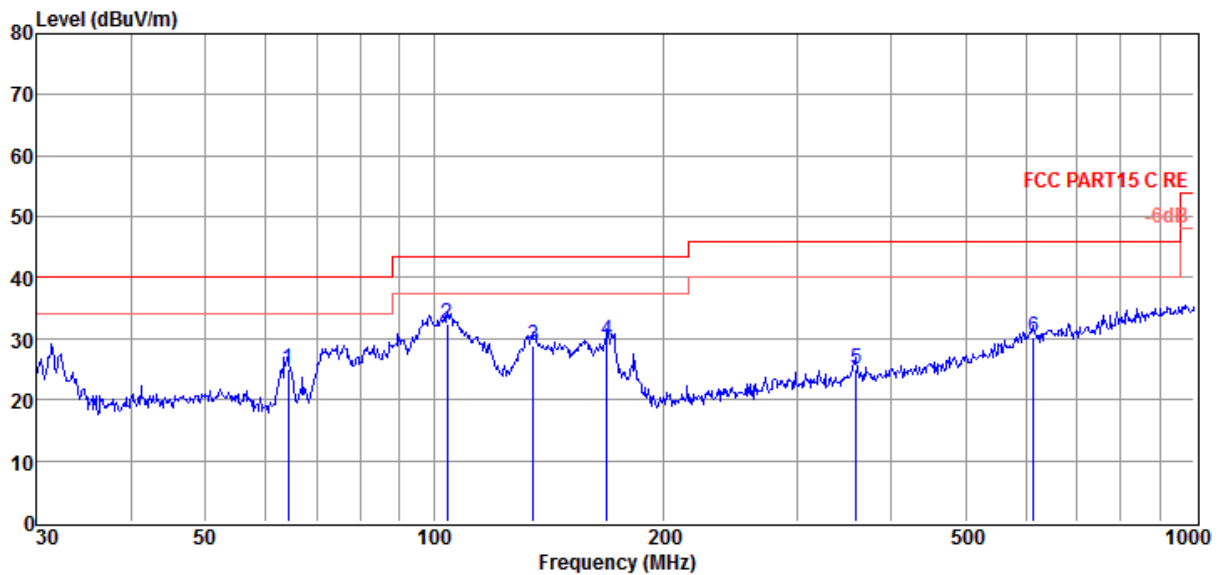
Test Mode : Tx mode

Condition : Temp:24.5'C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 VULB 9163 1#/3m/VERTICAL

Memo :

Data: 8



Item (Mark)	Freq. (MHz)	Read Level (dBuV)	Antenna Factor (dB/m)	Cable Loss dB	Result Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Detector	Polarization
1	64.21	10.48	10.43	4.13	25.04	40.00	-14.96	QP	VERTICAL
2	104.17	16.90	10.98	4.45	32.33	43.50	-11.17	QP	VERTICAL
3	135.03	16.25	7.82	4.67	28.74	43.50	-14.76	QP	VERTICAL
4	169.01	15.61	9.11	4.87	29.59	43.50	-13.91	QP	VERTICAL
5	359.19	4.63	14.49	5.79	24.91	46.00	-21.09	QP	VERTICAL
6	614.21	3.97	19.45	6.72	30.14	46.00	-15.86	QP	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with QP limit.

3. Test setup: RBW: 120 kHz, VBW: 300 kHz, Sweep time: auto.

Radiated Emission test (above 1GHz)

Freq (MHz)	Read level (dBμV)	Antenna Factor (dB/m)	PRM Factor (dB)	Cable Loss (dB)	Result Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector type	Polarization
11a CH36									
7834.00	47.99	37.13	43.75	9.08	50.45	74.00	-23.55	Peak	HORIZONTAL
8888.00	46.43	37.46	44.07	10.24	50.06	74.00	-23.94	Peak	HORIZONTAL
9602.00	47.25	37.80	44.28	10.68	51.45	74.00	-22.55	Peak	HORIZONTAL
10163.00	47.94	38.30	44.38	10.92	52.78	74.00	-21.22	Peak	HORIZONTAL
11268.00	46.78	38.69	44.21	11.04	52.30	74.00	-21.70	Peak	HORIZONTAL
12662.00	45.76	38.96	44.27	11.22	51.67	74.00	-22.33	Peak	HORIZONTAL
8378.00	46.40	37.28	43.91	9.66	49.43	74.00	-24.57	Peak	VERTICAL
8837.00	46.31	37.43	44.05	10.18	49.87	74.00	-24.13	Peak	VERTICAL
9925.00	47.00	38.12	44.38	10.85	51.59	74.00	-22.41	Peak	VERTICAL
10639.00	48.61	38.58	44.30	11.00	53.89	74.00	-20.11	Peak	VERTICAL
11642.00	45.45	38.69	44.15	11.00	50.99	74.00	-23.01	Peak	VERTICAL
12679.00	45.88	38.98	44.27	11.23	51.82	74.00	-22.18	Peak	VERTICAL
11a CH40									
7817.00	46.77	37.13	43.75	9.07	49.22	74.00	-24.78	Peak	HORIZONTAL
8395.00	47.20	37.28	43.92	9.68	50.24	74.00	-23.76	Peak	HORIZONTAL
8837.00	46.04	37.43	44.05	10.18	49.60	74.00	-24.40	Peak	HORIZONTAL
9466.00	47.50	37.69	44.24	10.61	51.56	74.00	-22.44	Peak	HORIZONTAL
12220.00	44.60	38.86	44.15	11.05	50.36	74.00	-23.64	Peak	HORIZONTAL
13121.00	45.22	39.42	44.38	11.47	51.73	74.00	-22.27	Peak	HORIZONTAL
7817.00	46.77	37.13	43.75	9.07	49.22	74.00	-24.78	Peak	VERTICAL
8548.00	46.02	37.32	43.96	9.85	49.23	74.00	-24.77	Peak	VERTICAL
9262.00	45.81	37.60	44.18	10.51	49.74	74.00	-24.26	Peak	VERTICAL
9806.00	46.04	38.01	44.34	10.79	50.50	74.00	-23.50	Peak	VERTICAL
11999.00	44.50	38.90	44.10	10.97	50.27	74.00	-23.73	Peak	VERTICAL
13274.00	44.93	39.57	44.42	11.63	51.71	74.00	-22.29	Peak	VERTICAL
11a CH48									
8395.00	45.96	37.28	43.92	9.68	49.00	74.00	-25.00	Peak	HORIZONTAL
8786.00	45.69	37.41	44.04	10.13	49.19	74.00	-24.81	Peak	HORIZONTAL
9602.00	46.53	37.80	44.28	10.68	50.73	74.00	-23.27	Peak	HORIZONTAL
10129.00	46.87	38.28	44.38	10.91	51.68	74.00	-22.32	Peak	HORIZONTAL
11999.00	43.80	38.90	44.10	10.97	49.57	74.00	-24.43	Peak	HORIZONTAL
13121.00	45.87	39.42	44.38	11.47	52.38	74.00	-21.62	Peak	HORIZONTAL
8769.00	45.29	37.41	44.03	10.11	48.78	74.00	-25.22	Peak	VERTICAL
9262.00	46.13	37.60	44.18	10.51	50.06	74.00	-23.94	Peak	VERTICAL
10112.00	46.73	38.27	44.38	10.91	51.53	74.00	-22.47	Peak	VERTICAL
11863.00	44.28	38.82	44.12	10.98	49.96	74.00	-24.04	Peak	VERTICAL
12883.00	45.03	39.18	44.32	11.31	51.20	74.00	-22.80	Peak	VERTICAL
13614.00	45.04	39.85	44.50	11.97	52.36	74.00	-21.64	Peak	VERTICAL
Conclusion: Pass									
Note: $-27 \text{ dBm/MHz Limit} = 95.2 + \text{EIRP}[\text{dBm}] = 95.2 - 27 = 68.2 \text{ dB}\mu\text{V/m}$ For transmitters operating in the 5150MHz-5250MHz, 5725MHz-5850MHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz.									

Freq (MHz)	Read level (dBμV)	Antenna Factor (dB/m)	PRM Factor (dB)	Cable Loss (dB)	Result Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector type	Polarization
11a CH149									
8225.00	45.91	37.24	43.87	9.49	48.77	74.00	-25.23	Peak	HORIZONTAL
8922.00	46.66	37.47	44.08	10.28	50.33	74.00	-23.67	Peak	HORIZONTAL
9483.00	47.04	37.69	44.24	10.62	51.11	74.00	-22.89	Peak	HORIZONTAL
10503.00	47.77	38.50	44.32	10.98	52.93	74.00	-21.07	Peak	HORIZONTAL
11302.00	45.76	38.68	44.20	11.03	51.27	74.00	-22.73	Peak	HORIZONTAL
12424.00	45.11	38.82	44.21	11.13	50.85	74.00	-23.15	Peak	HORIZONTAL
8174.00	47.19	37.23	43.85	9.43	50.00	74.00	-24.00	Peak	VERTICAL
9347.00	45.76	37.64	44.20	10.55	49.75	74.00	-24.25	Peak	VERTICAL
9823.00	47.03	38.02	44.35	10.80	51.50	74.00	-22.50	Peak	VERTICAL
10758.00	47.39	38.65	44.29	11.02	52.77	74.00	-21.23	Peak	VERTICAL
11132.00	46.47	38.75	44.23	11.05	52.04	74.00	-21.96	Peak	VERTICAL
12152.00	44.97	38.87	44.14	11.03	50.73	74.00	-23.27	Peak	VERTICAL
11a CH157									
8412.00	46.46	37.28	43.92	9.70	49.52	74.00	-24.48	Peak	HORIZONTAL
8922.00	46.66	37.47	44.08	10.28	50.33	74.00	-23.67	Peak	HORIZONTAL
9772.00	47.53	37.97	44.33	10.77	51.94	74.00	-22.06	Peak	HORIZONTAL
10231.00	48.60	38.34	44.37	10.93	53.50	74.00	-20.50	Peak	HORIZONTAL
10945.00	47.35	38.77	44.26	11.05	52.91	74.00	-21.09	Peak	HORIZONTAL
12254.00	45.19	38.85	44.16	11.07	50.95	74.00	-23.05	Peak	HORIZONTAL
8208.00	45.64	37.24	43.86	9.47	48.49	74.00	-25.51	Peak	VERTICAL
8480.00	46.33	37.30	43.94	9.78	49.47	74.00	-24.53	Peak	VERTICAL
9432.00	45.84	37.67	44.23	10.59	49.87	74.00	-24.13	Peak	VERTICAL
9874.00	45.59	38.07	44.36	10.82	50.12	74.00	-23.88	Peak	VERTICAL
10367.00	47.36	38.42	44.34	10.95	52.39	74.00	-21.61	Peak	VERTICAL
11591.00	44.38	38.65	44.16	11.01	49.88	74.00	-24.12	Peak	VERTICAL
11a CH165									
7834.00	46.26	37.13	43.75	9.08	48.72	74.00	-25.28	Peak	HORIZONTAL
8769.00	45.47	37.41	44.03	10.11	48.96	74.00	-25.04	Peak	HORIZONTAL
9279.00	46.36	37.61	44.18	10.52	50.31	74.00	-23.69	Peak	HORIZONTAL
9891.00	46.12	38.09	44.37	10.83	50.67	74.00	-23.33	Peak	HORIZONTAL
10401.00	46.76	38.44	44.34	10.96	51.82	74.00	-22.18	Peak	HORIZONTAL
12101.00	44.09	38.88	44.13	11.01	49.85	74.00	-24.15	Peak	HORIZONTAL
8378.00	45.67	37.28	43.91	9.66	48.70	74.00	-25.30	Peak	VERTICAL
8939.00	46.43	37.48	44.08	10.30	50.13	74.00	-23.87	Peak	VERTICAL
9466.00	47.40	37.69	44.24	10.61	51.46	74.00	-22.54	Peak	VERTICAL
10095.00	47.78	38.26	44.39	10.91	52.56	74.00	-21.44	Peak	VERTICAL
11812.00	45.06	38.79	44.13	10.99	50.71	74.00	-23.29	Peak	VERTICAL
12696.00	46.15	39.00	44.27	11.23	52.11	74.00	-21.89	Peak	VERTICAL
Conclusion: Pass									
Note: $-27 \text{ dBm/MHz Limit} = 95.2 + \text{EIRP}[\text{dBm}] = 95.2 - 27 = 68.2 \text{ dBμV/m}$ For transmitters operating in the 5150MHz-5250MHz, 5725MHz-5850MHz band: all emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27 dBm/MHz. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.									

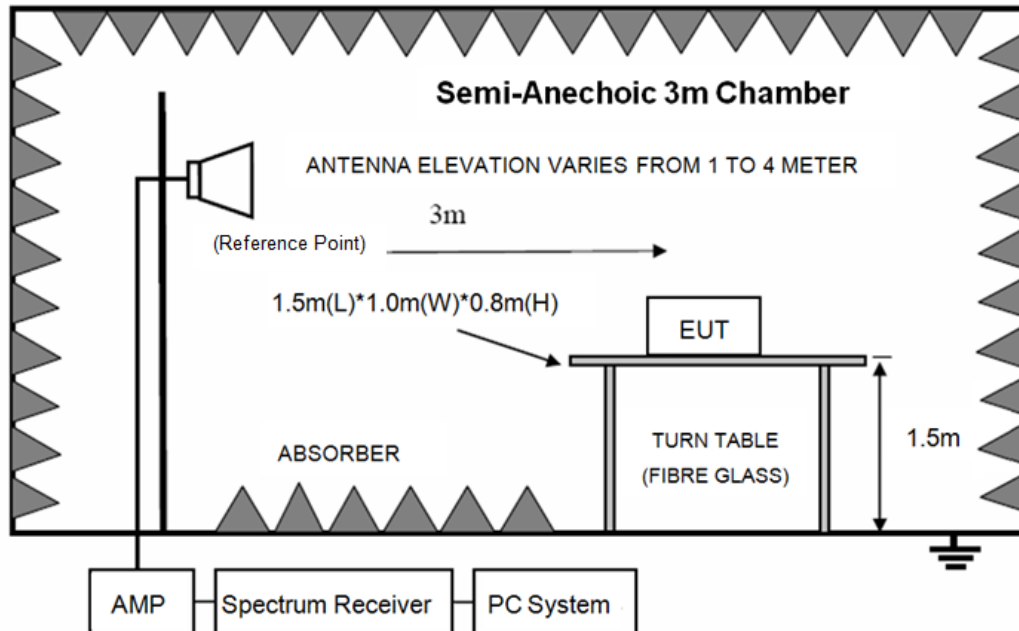
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with QP limit, QP Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

9. Band Edge Compliance

9.1. Block diagram of test setup



9.2. Limit

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an EIRP of -27dBm/MHz

For transmitters operating in the 5.725-5.85 GHz band: All emissions within the frequency range from the band edge to 10 MHz above or below the band edge shall not exceed an EIRP of -17dBm/MHz; for frequencies 10MHz or greater above or below the band edge, emissions shall not exceed an EIRP of -27dBm/MHz

$$-17 \text{ dBm/MHz Limit} = 95.2 + \text{EIRP[dBm]} = 95.2 - 17 = 78.2 \text{ dB}\mu\text{V/m}$$

$$-27 \text{ dBm/MHz Limit} = 95.2 + \text{EIRP[dBm]} = 95.2 - 27 = 68.2 \text{ dB}\mu\text{V/m}$$

9.3. Test Procedure

Same with clause 8.3 except change investigated frequency range from 5.15-5.25 GHz, 5.725-5.85 GHz.

Remark: All restriction band have been tested, and only the worse case is shown in report.

9.4. Test result

PASS. (See below detailed test result)

Note1: As specified in 15.407(b), emissions above 1000 MHz that are outside of the restricted bands are subject to a peak emission limit of -27 dBm/MHz (or -17 dBm/MHz as specified in 15.407(b)(4)). However, an out-of-band emission that complies with both the average and peak

limits of 15.209 is not required to satisfy the -27 dBm/MHz or -17 dBm/MHz peak emission limit

Note2: 11a ANT 1, 11n, 11ac mode ANT 1 ANT 2 mode and MIMO mode all have been tested, only ANT 1 mode is the worst case and reported.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

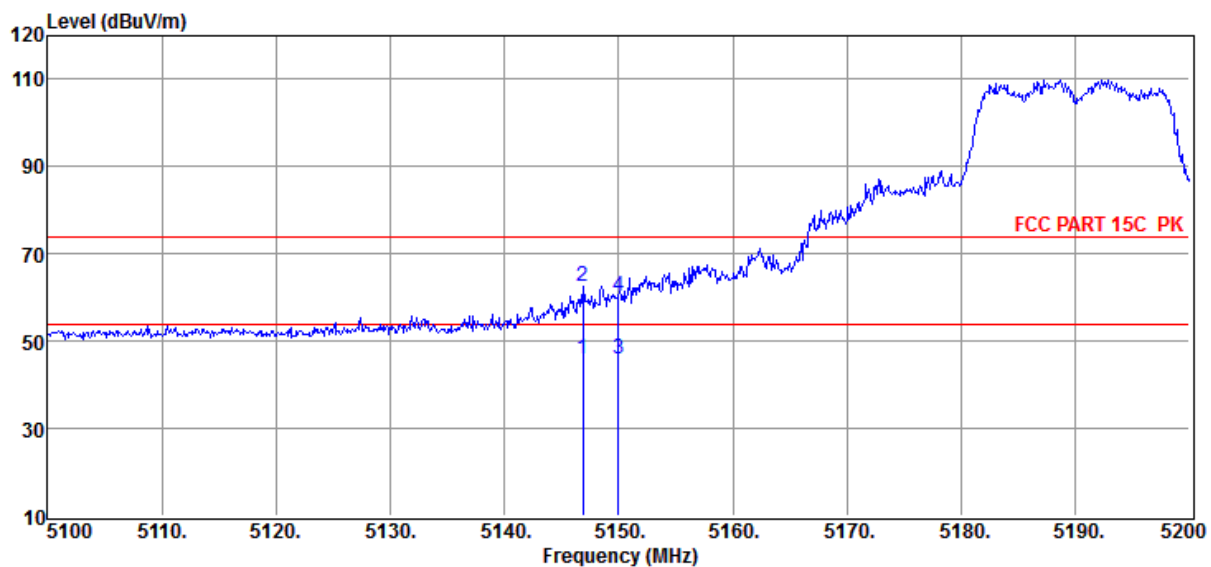
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11A 5180

Data: 138



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5146.90	46.80	35.15	43.71	7.67	45.91	54.00	-8.09	Average	HORIZONTAL
2	5146.90	63.26	35.15	43.71	7.67	62.37	74.00	-11.63	Peak	HORIZONTAL
3	5150.00	46.72	35.15	43.71	7.67	45.83	54.00	-8.17	Average	HORIZONTAL
4	5150.00	61.11	35.15	43.71	7.67	60.22	74.00	-13.78	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

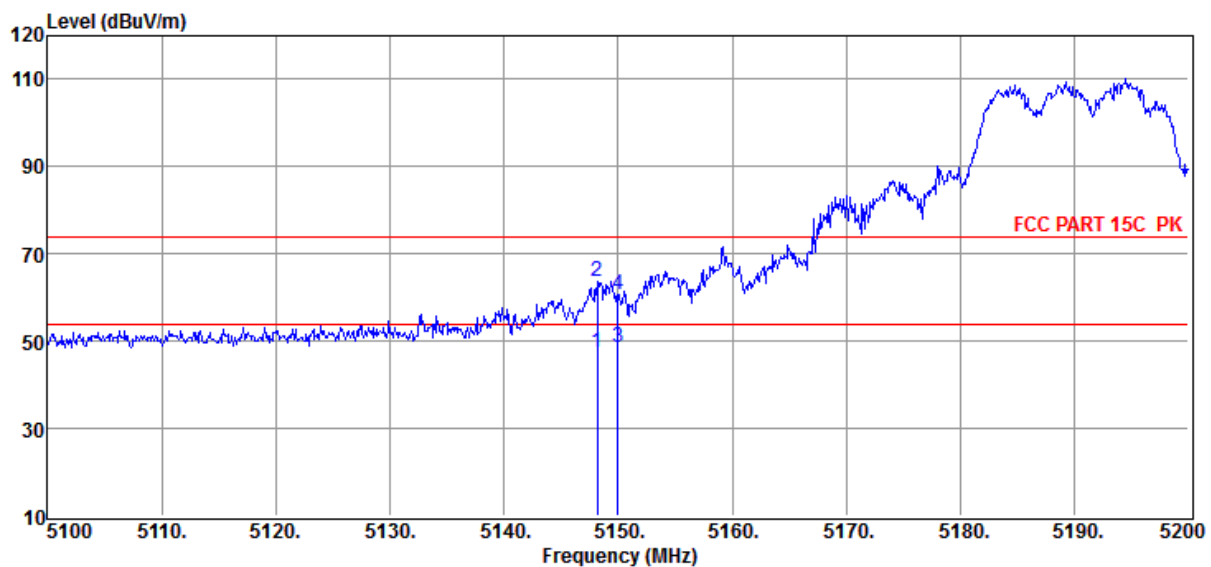
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11A 5180

Data: 137



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5148.20	48.46	35.15	43.71	7.67	47.57	54.00	-6.43	Average	VERTICAL
2	5148.20	64.61	35.15	43.71	7.67	63.72	74.00	-10.28	Peak	VERTICAL
3	5150.00	49.52	35.15	43.71	7.67	48.63	54.00	-5.37	Average	VERTICAL
4	5150.00	61.41	35.15	43.71	7.67	60.52	74.00	-13.48	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

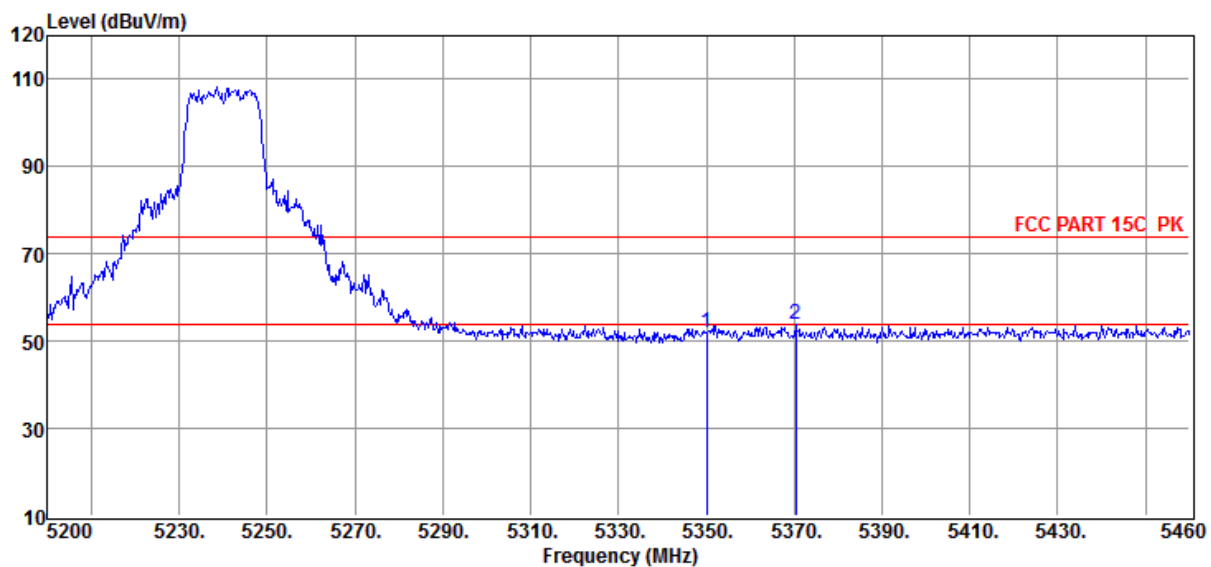
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11A 5240

Data: 139



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5350.02	52.40	35.35	43.59	7.80	51.96	74.00	-22.04	Peak	HORIZONTAL
2	5370.30	54.14	35.37	43.58	7.81	53.74	74.00	-20.26	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

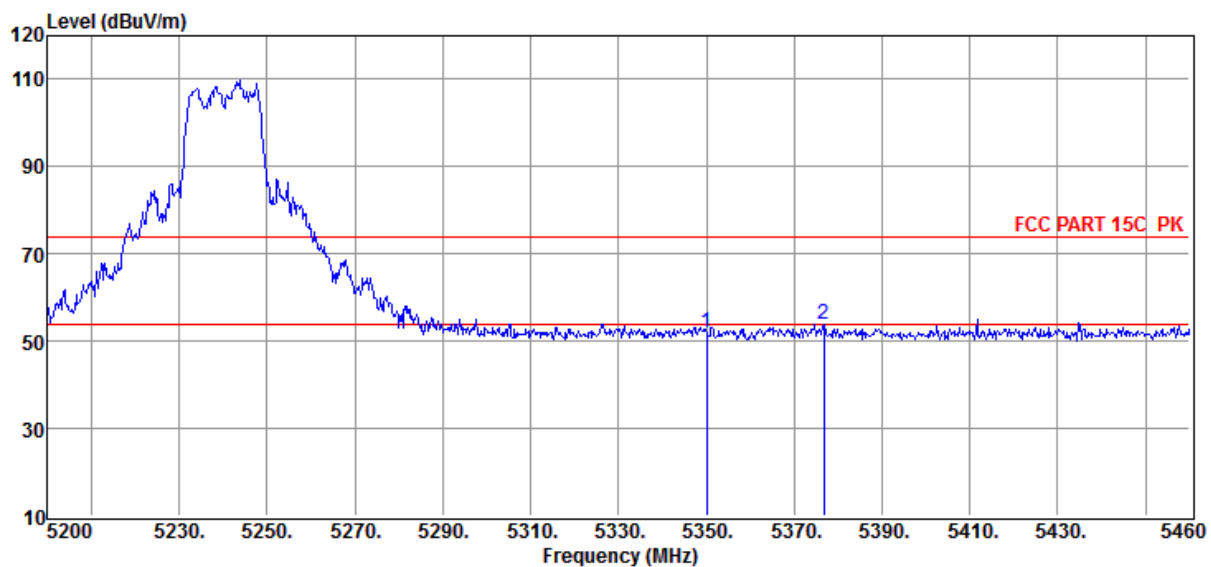
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11A 5240

Data: 140



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5350.02	52.24	35.35	43.59	7.80	51.80	74.00	-22.20	Peak	VERTICAL
2	5376.80	54.16	35.38	43.57	7.82	53.79	74.00	-20.21	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

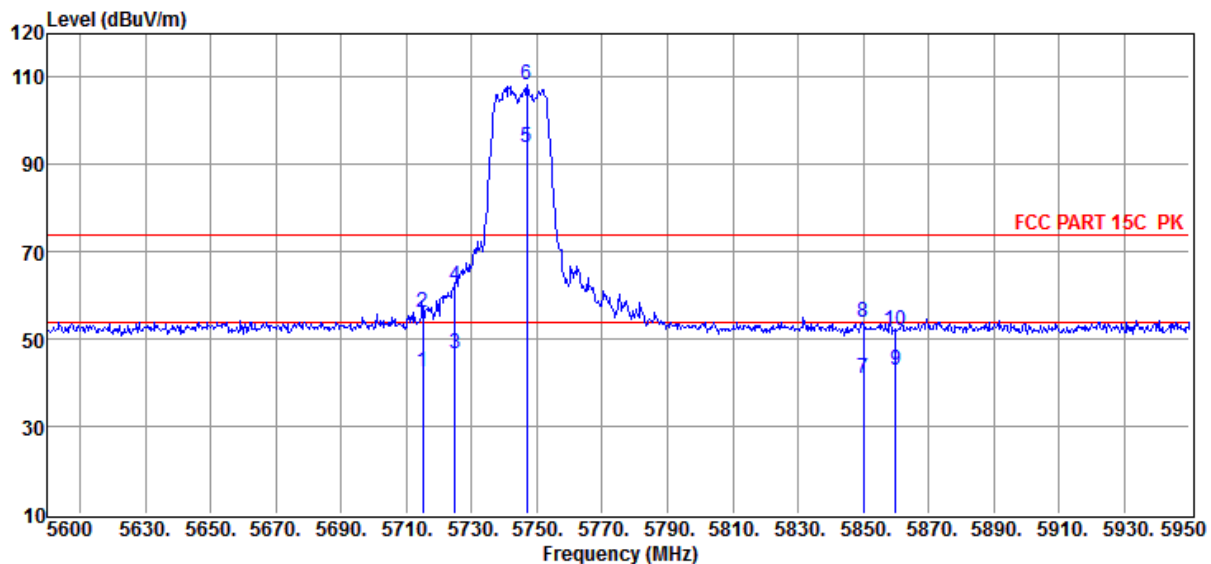
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11A 5745

Data: 142



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.36	35.59	43.37	8.03	42.61	89.4	-46.79	Average	HORIZONTAL
2	5715.00	55.82	35.59	43.37	8.03	56.07	109.4	-53.33	Peak	HORIZONTAL
3	5725.00	46.30	35.59	43.37	8.04	46.56	102.2	-55.64	Average	HORIZONTAL
4	5725.00	62.05	35.59	43.37	8.04	62.31	122.2	-59.89	Peak	HORIZONTAL
5	5747.00	93.65	35.60	43.35	8.05	93.95	105.2	-11.25	Average	HORIZONTAL
6	5747.00	107.94	35.60	43.35	8.05	108.24	125.2	-16.96	Peak	HORIZONTAL
7	5850.00	40.65	35.64	43.29	8.12	41.12	102.2	-61.08	Average	HORIZONTAL
8	5850.00	53.42	35.64	43.29	8.12	53.89	122.2	-68.31	Peak	HORIZONTAL
9	5860.00	42.37	35.64	43.28	8.12	42.85	89.4	-46.55	Average	HORIZONTAL
10	5860.00	51.35	35.64	43.28	8.12	51.83	109.4	-57.57	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

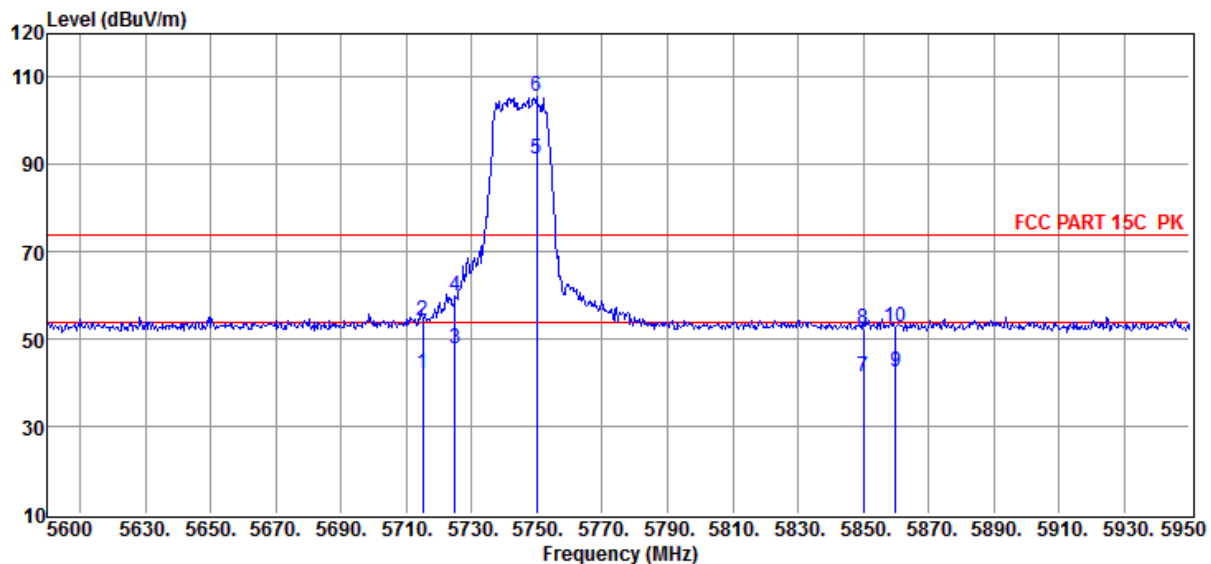
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11A 5745

Data: 141



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5715.00	41.85	35.59	43.37	8.03	42.10	89.4	-47.30	Average	VERTICAL
2	5715.00	53.89	35.59	43.37	8.03	54.14	109.4	-55.26	Peak	VERTICAL
3	5725.00	47.70	35.59	43.37	8.04	47.96	102.2	-54.24	Average	VERTICAL
4	5725.00	59.61	35.59	43.37	8.04	59.87	122.2	-62.33	Peak	VERTICAL
5	5749.80	90.92	35.60	43.35	8.05	91.22	105.2	-13.98	Average	VERTICAL
6	5749.80	105.28	35.60	43.35	8.05	105.58	125.2	-19.62	Peak	VERTICAL
7	5850.00	40.88	35.64	43.29	8.12	41.35	102.2	-60.85	Average	VERTICAL
8	5850.00	51.80	35.64	43.29	8.12	52.27	122.2	-69.93	Peak	VERTICAL
9	5860.00	41.86	35.64	43.28	8.12	42.34	89.4	-47.06	Average	VERTICAL
10	5860.00	52.11	35.64	43.28	8.12	52.59	109.4	-56.81	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

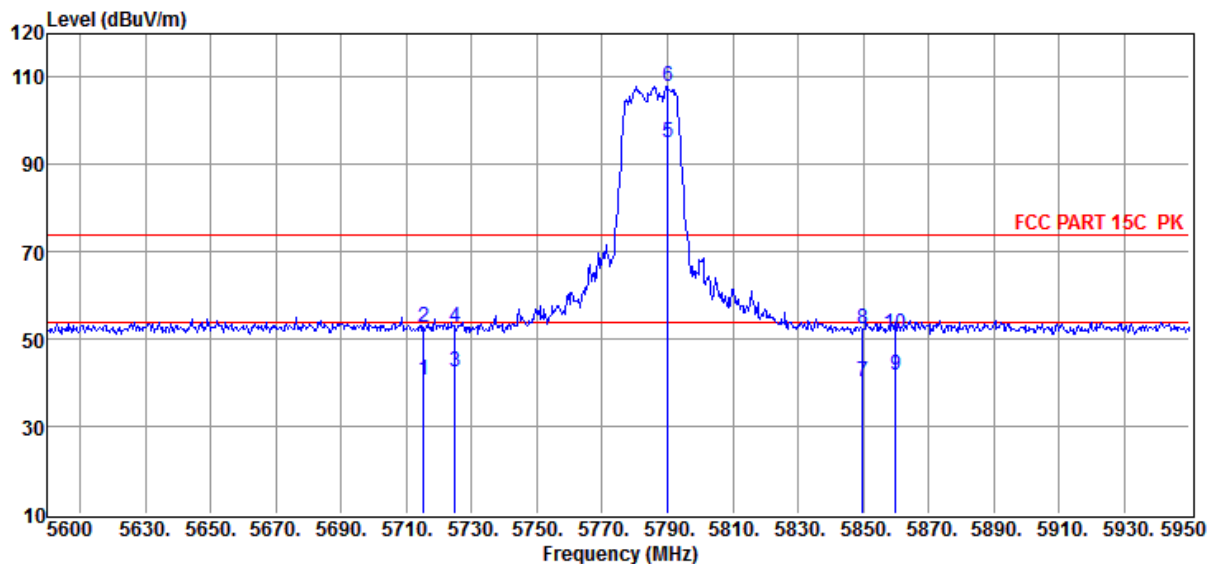
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11A 5785

Data: 143



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5715.15	40.44	35.59	43.37	8.03	40.69	89.4	-48.71	Average	HORIZONTAL
2	5715.15	52.30	35.59	43.37	8.03	52.55	109.4	-56.85	Peak	HORIZONTAL
3	5724.95	42.32	35.59	43.37	8.04	42.58	102.2	-59.62	Average	HORIZONTAL
4	5724.95	52.38	35.59	43.37	8.04	52.64	122.2	-69.56	Peak	HORIZONTAL
5	5790.05	94.58	35.62	43.33	8.08	94.95	105.2	-10.25	Average	HORIZONTAL
6	5790.05	107.59	35.62	43.33	8.08	107.96	125.2	-17.24	Peak	HORIZONTAL
7	5849.90	39.85	35.64	43.29	8.12	40.32	102.2	-61.88	Average	HORIZONTAL
8	5849.90	51.75	35.64	43.29	8.12	52.22	122.2	-69.98	Peak	HORIZONTAL
9	5860.00	41.36	35.64	43.28	8.12	41.84	89.4	-47.56	Average	HORIZONTAL
10	5860.00	50.86	35.64	43.28	8.12	51.34	109.4	-58.06	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

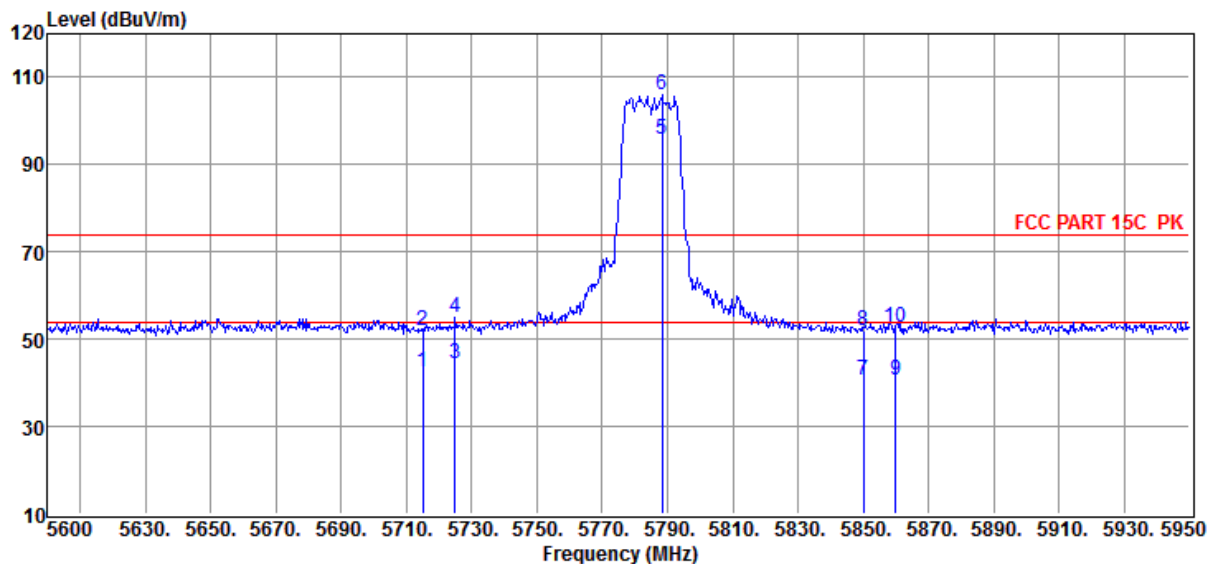
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11A 5785

Data: 144



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.35	35.59	43.37	8.03	42.60	89.4	-46.80	Average	VERTICAL
2	5715.00	51.76	35.59	43.37	8.03	52.01	109.4	-57.39	Peak	VERTICAL
3	5725.00	44.25	35.59	43.37	8.04	44.51	102.2	-57.69	Average	VERTICAL
4	5725.00	54.75	35.59	43.37	8.04	55.01	122.2	-67.19	Peak	VERTICAL
5	5788.30	95.36	35.62	43.33	8.08	95.73	105.2	-9.47	Average	VERTICAL
6	5788.30	105.57	35.62	43.33	8.08	105.94	125.2	-19.26	Peak	VERTICAL
7	5850.00	40.25	35.64	43.29	8.12	40.72	102.2	-61.48	Average	VERTICAL
8	5850.00	51.33	35.64	43.29	8.12	51.80	122.2	-70.40	Peak	VERTICAL
9	5860.00	40.13	35.64	43.28	8.12	40.61	89.4	-48.79	Average	VERTICAL
10	5860.00	52.09	35.64	43.28	8.12	52.57	109.4	-56.83	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

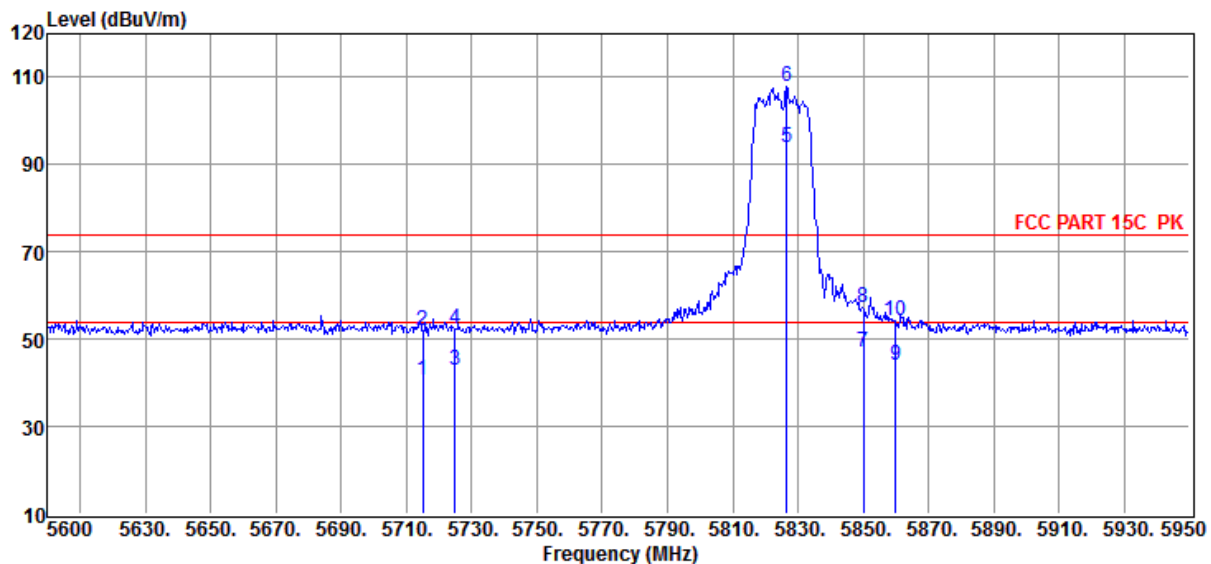
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11A 5825

Data: 146



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	40.41	35.59	43.37	8.03	40.66	89.4	-48.74	Average	HORIZONTAL
2	5715.00	51.59	35.59	43.37	8.03	51.84	109.4	-57.56	Peak	HORIZONTAL
3	5725.00	42.56	35.59	43.37	8.04	42.82	102.2	-59.38	Average	HORIZONTAL
4	5725.00	52.05	35.59	43.37	8.04	52.31	122.2	-69.89	Peak	HORIZONTAL
5	5826.45	93.54	35.63	43.30	8.10	93.97	105.2	-11.23	Average	HORIZONTAL
6	5826.45	107.43	35.63	43.30	8.10	107.86	125.2	-17.34	Peak	HORIZONTAL
7	5850.00	46.52	35.64	43.29	8.12	46.99	102.2	-55.21	Average	HORIZONTAL
8	5850.00	56.69	35.64	43.29	8.12	57.16	122.2	-65.04	Peak	HORIZONTAL
9	5860.00	43.52	35.64	43.28	8.12	44.00	89.4	-45.40	Average	HORIZONTAL
10	5860.00	53.68	35.64	43.28	8.12	54.16	109.4	-55.24	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

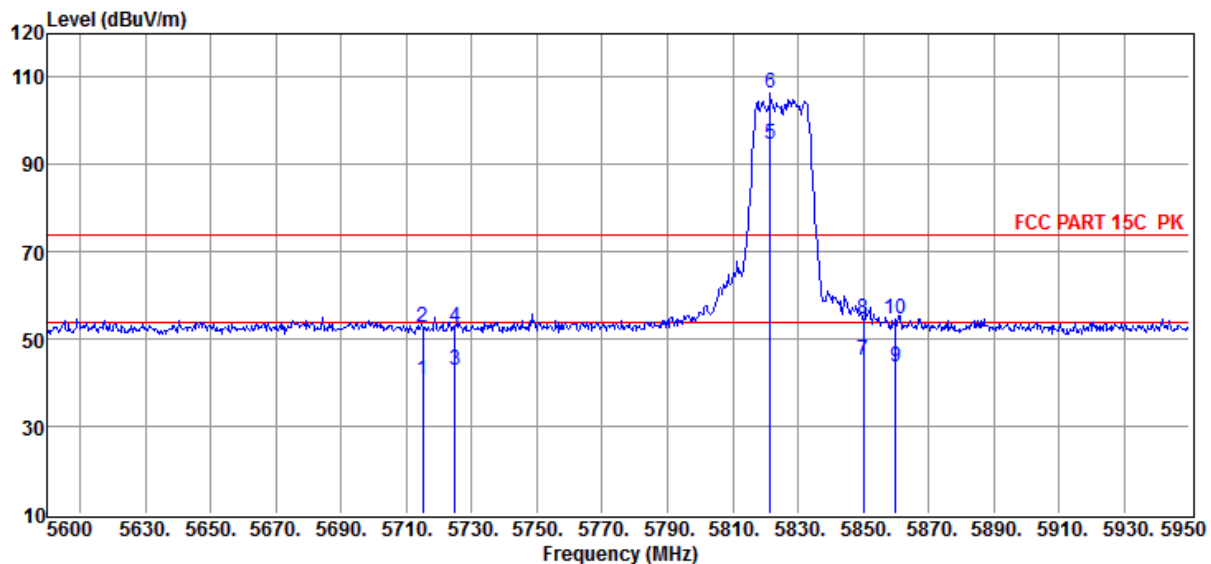
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11A 5825

Data: 145



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	40.45	35.59	43.37	8.03	40.70	89.4	-48.70	Average	VERTICAL
2	5715.00	52.28	35.59	43.37	8.03	52.53	109.4	-56.87	Peak	VERTICAL
3	5725.00	42.56	35.59	43.37	8.04	42.82	102.2	-59.38	Average	VERTICAL
4	5725.00	52.64	35.59	43.37	8.04	52.90	122.2	-69.30	Peak	VERTICAL
5	5821.55	94.22	35.63	43.31	8.10	94.64	105.2	-10.56	Average	VERTICAL
6	5821.55	105.96	35.63	43.31	8.10	106.38	125.2	-18.82	Peak	VERTICAL
7	5850.00	44.52	35.64	43.29	8.12	44.99	102.2	-57.21	Average	VERTICAL
8	5850.00	54.30	35.64	43.29	8.12	54.77	122.2	-67.43	Peak	VERTICAL
9	5860.00	43.21	35.64	43.28	8.12	43.69	89.4	-45.71	Average	VERTICAL
10	5860.00	54.03	35.64	43.28	8.12	54.51	109.4	-54.89	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

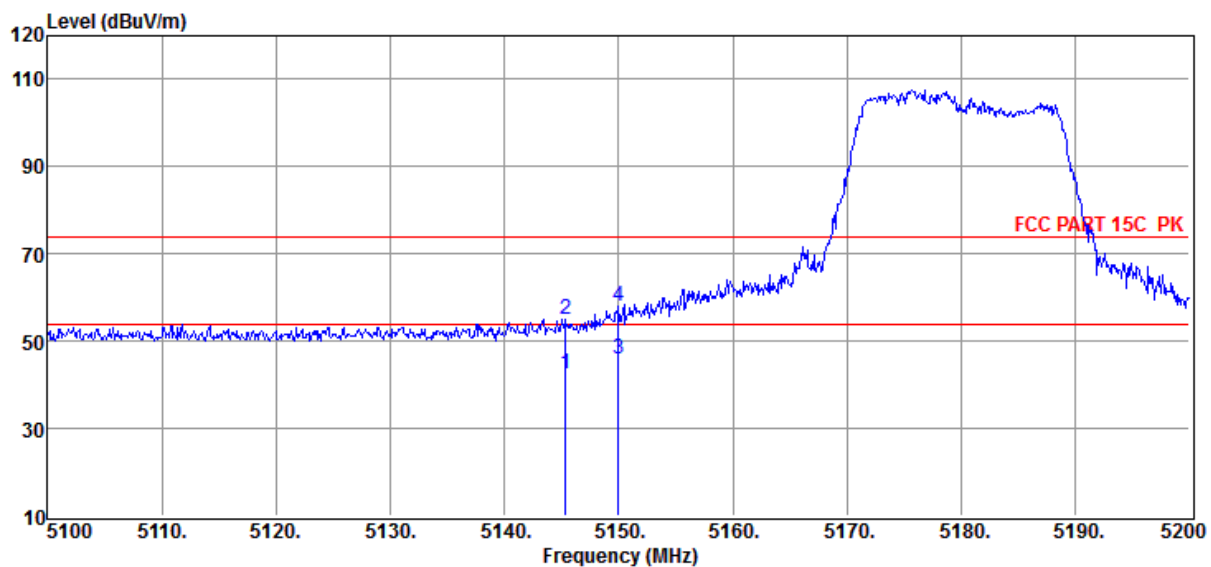
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11N20 5180

Data: 147



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5145.40	43.51	35.15	43.71	7.67	42.62	54.00	-11.38	Average	HORIZONTAL
2	5145.40	55.91	35.15	43.71	7.67	55.02	74.00	-18.98	Peak	HORIZONTAL
3	5150.00	46.76	35.15	43.71	7.67	45.87	54.00	-8.13	Average	HORIZONTAL
4	5150.00	59.03	35.15	43.71	7.67	58.14	74.00	-15.86	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

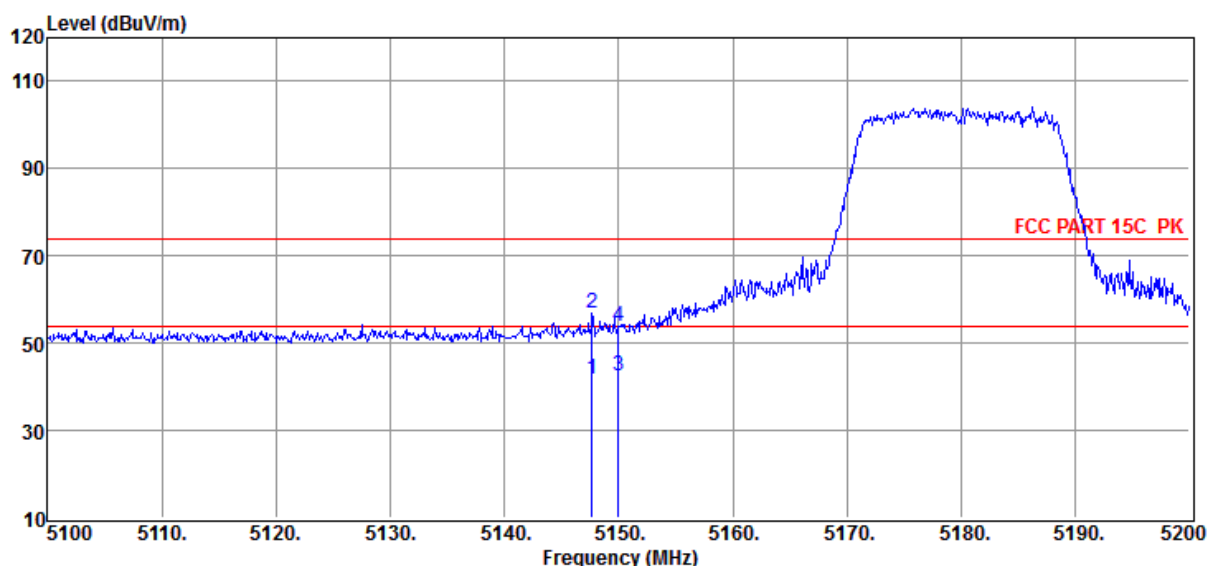
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11N20 5180

Data: 148



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5147.70	42.65	35.15	43.71	7.67	41.76	54.00	-12.24	Average	VERTICAL
2	5147.70	57.65	35.15	43.71	7.67	56.76	74.00	-17.24	Peak	VERTICAL
3	5150.00	43.57	35.15	43.71	7.67	42.68	54.00	-11.32	Average	VERTICAL
4	5150.00	54.87	35.15	43.71	7.67	53.98	74.00	-20.02	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

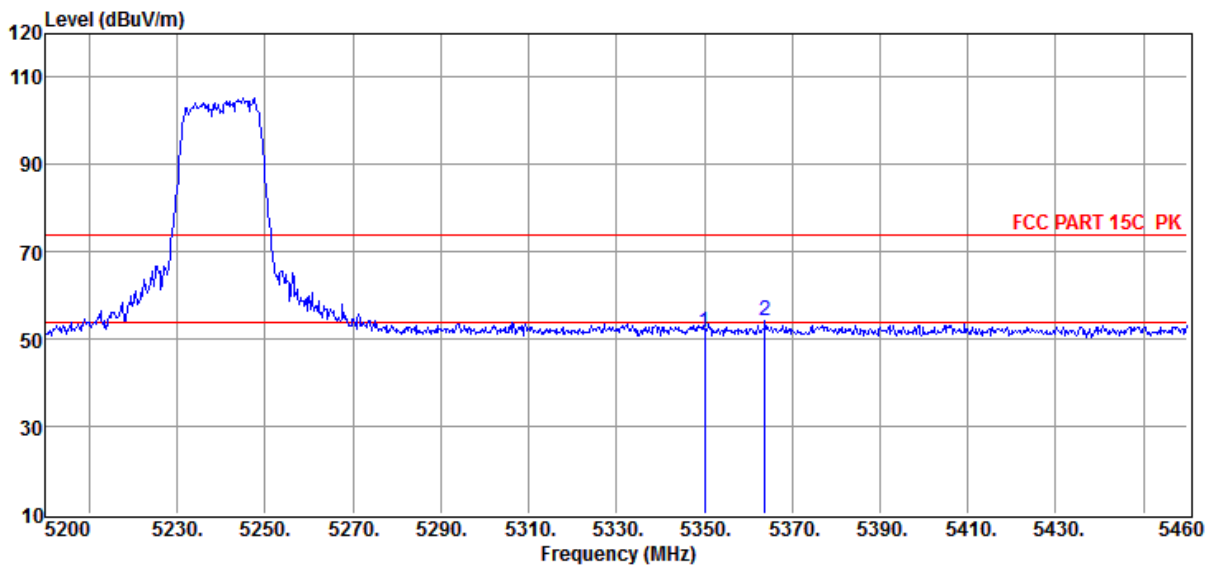
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11N20 5240

Data: 150



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5350.02	52.15	35.35	43.59	7.80	51.71	74.00	-22.29	Peak	HORIZONTAL
2	5363.80	54.55	35.36	43.58	7.81	54.14	74.00	-19.86	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

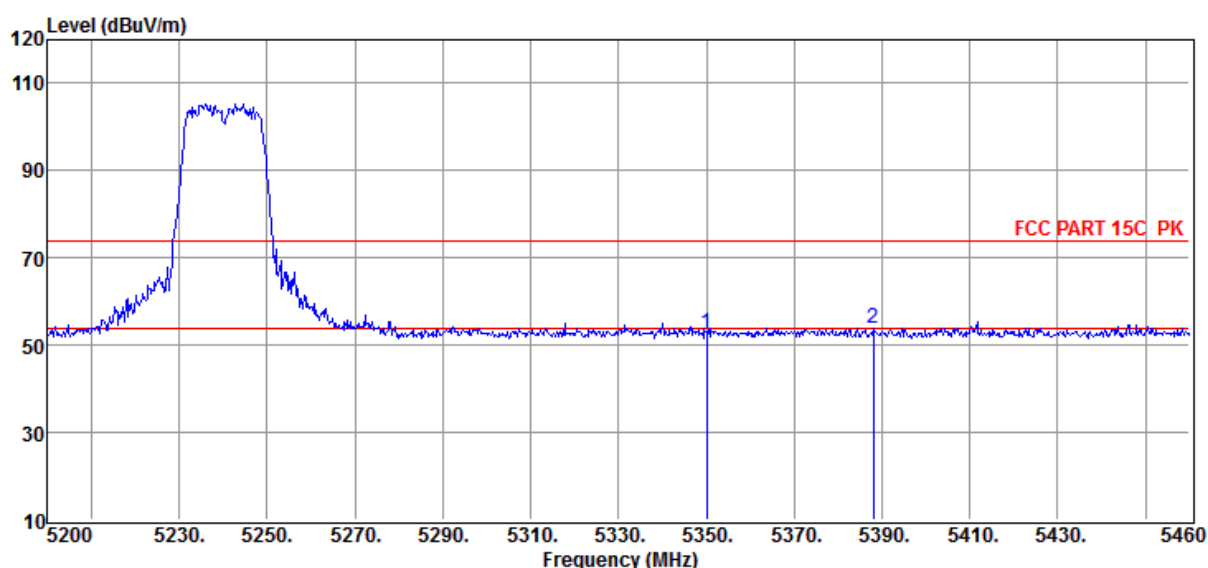
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11N20 5240

Data: 149



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5350.02	53.27	35.35	43.59	7.80	52.83	74.00	-21.17	Peak	VERTICAL
2	5387.98	54.18	35.39	43.57	7.82	53.82	74.00	-20.18	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

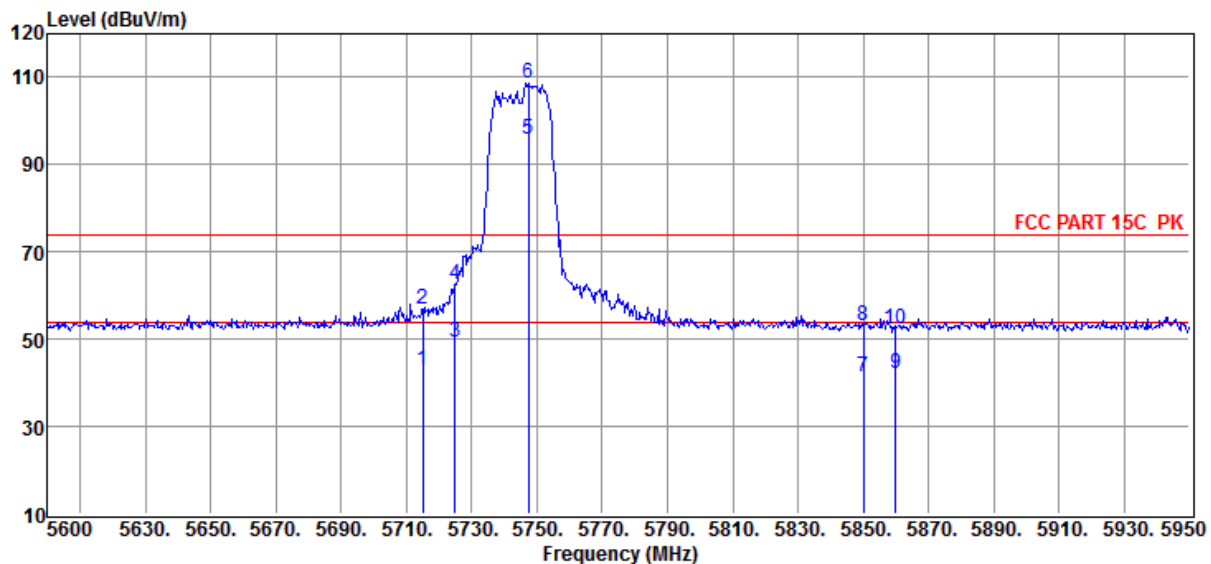
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11N20 5745

Data: 151



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.66	35.59	43.37	8.03	42.91	89.4	-46.49	Average	HORIZONTAL
2	5715.00	56.49	35.59	43.37	8.03	56.74	109.4	-52.66	Peak	HORIZONTAL
3	5725.00	48.89	35.59	43.37	8.04	49.15	102.2	-53.05	Average	HORIZONTAL
4	5725.00	62.15	35.59	43.37	8.04	62.41	122.2	-59.79	Peak	HORIZONTAL
5	5747.35	95.49	35.60	43.35	8.05	95.79	105.2	-9.41	Average	HORIZONTAL
6	5747.35	108.37	35.60	43.35	8.05	108.67	125.2	-16.53	Peak	HORIZONTAL
7	5850.00	40.93	35.64	43.29	8.12	41.40	102.2	-60.80	Average	HORIZONTAL
8	5850.00	52.81	35.64	43.29	8.12	53.28	122.2	-68.92	Peak	HORIZONTAL
9	5860.00	41.52	35.64	43.28	8.12	42.00	89.4	-47.40	Average	HORIZONTAL
10	5860.00	52.02	35.64	43.28	8.12	52.50	109.4	-56.90	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

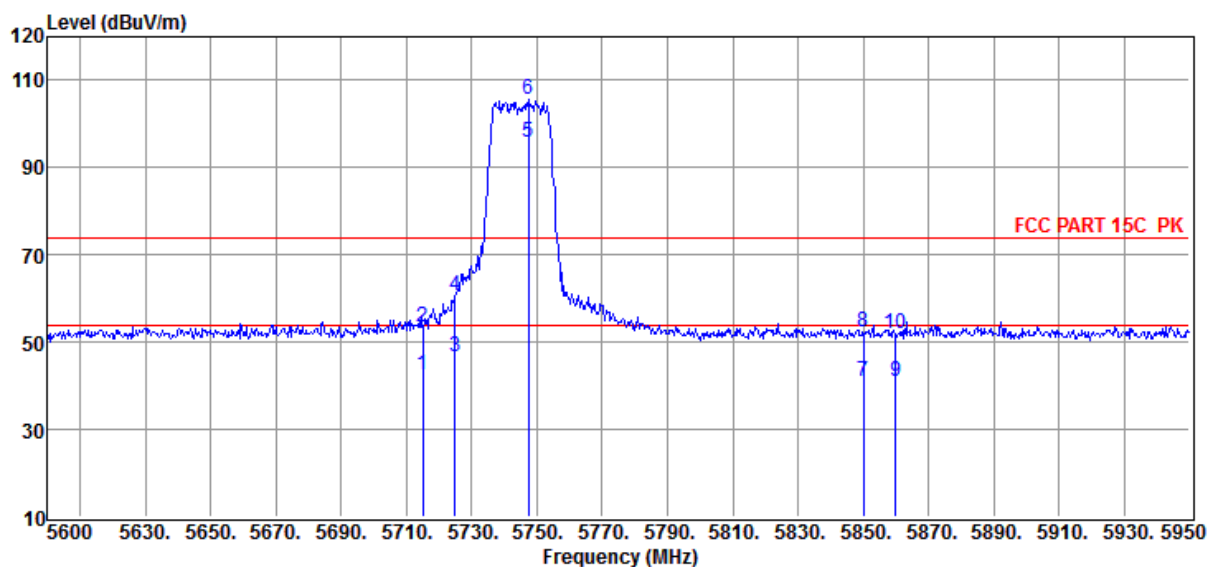
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11N20 5745

Data: 152



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.35	35.59	43.37	8.03	42.60	89.4	-46.80	Average	VERTICAL
2	5715.00	53.12	35.59	43.37	8.03	53.37	109.4	-56.03	Peak	VERTICAL
3	5725.00	46.52	35.59	43.37	8.04	46.78	102.2	-55.42	Average	VERTICAL
4	5725.00	60.33	35.59	43.37	8.04	60.59	122.2	-61.61	Peak	VERTICAL
5	5747.35	95.63	35.60	43.35	8.05	95.93	105.2	-9.27	Average	VERTICAL
6	5747.35	105.30	35.60	43.35	8.05	105.60	125.2	-19.60	Peak	VERTICAL
7	5850.00	40.52	35.64	43.29	8.12	40.99	102.2	-61.21	Average	VERTICAL
8	5850.00	51.91	35.64	43.29	8.12	52.38	122.2	-69.82	Peak	VERTICAL
9	5860.00	40.56	35.64	43.28	8.12	41.04	89.4	-48.36	Average	VERTICAL
10	5860.00	51.64	35.64	43.28	8.12	52.12	109.4	-57.28	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

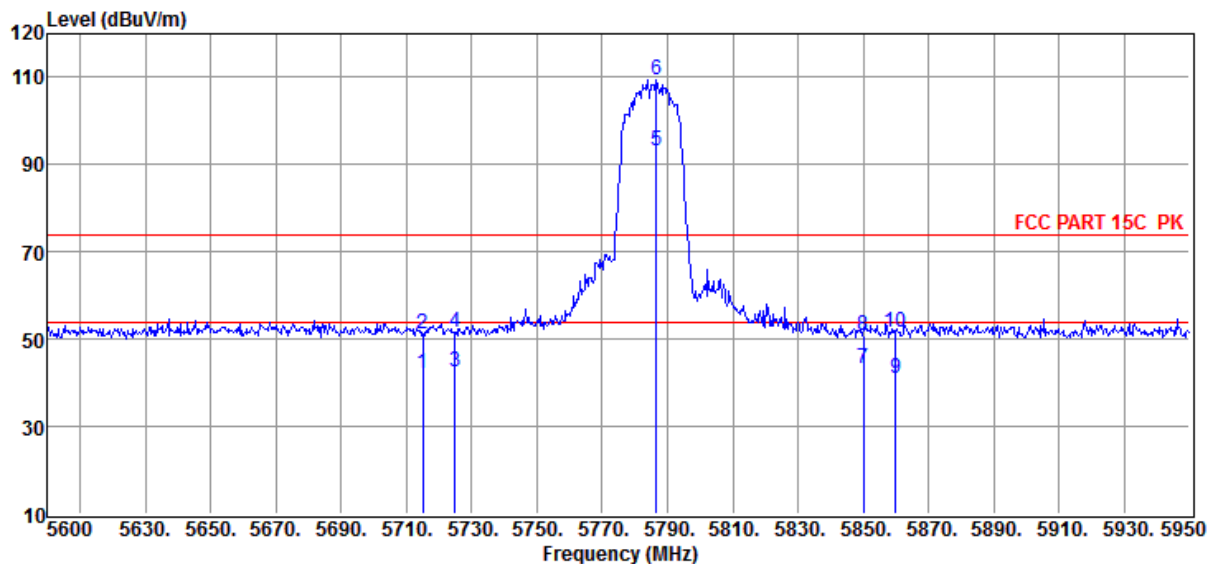
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11N20 5785

Data: 154



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.02	35.59	43.37	8.03	42.27	89.4	-47.13	Average	HORIZONTAL
2	5715.00	50.96	35.59	43.37	8.03	51.21	109.4	-58.19	Peak	HORIZONTAL
3	5725.00	42.26	35.59	43.37	8.04	42.52	102.2	-59.68	Average	HORIZONTAL
4	5725.00	51.13	35.59	43.37	8.04	51.39	122.2	-70.81	Peak	HORIZONTAL
5	5786.55	92.63	35.61	43.33	8.08	92.99	105.2	-12.21	Average	HORIZONTAL
6	5786.55	109.17	35.61	43.33	8.08	109.53	125.2	-15.67	Peak	HORIZONTAL
7	5850.00	42.65	35.64	43.29	8.12	43.12	102.2	-59.08	Average	HORIZONTAL
8	5850.00	50.27	35.64	43.29	8.12	50.74	122.2	-71.46	Peak	HORIZONTAL
9	5860.00	40.52	35.64	43.28	8.12	41.00	89.4	-48.40	Average	HORIZONTAL
10	5860.00	51.12	35.64	43.28	8.12	51.60	109.4	-57.80	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

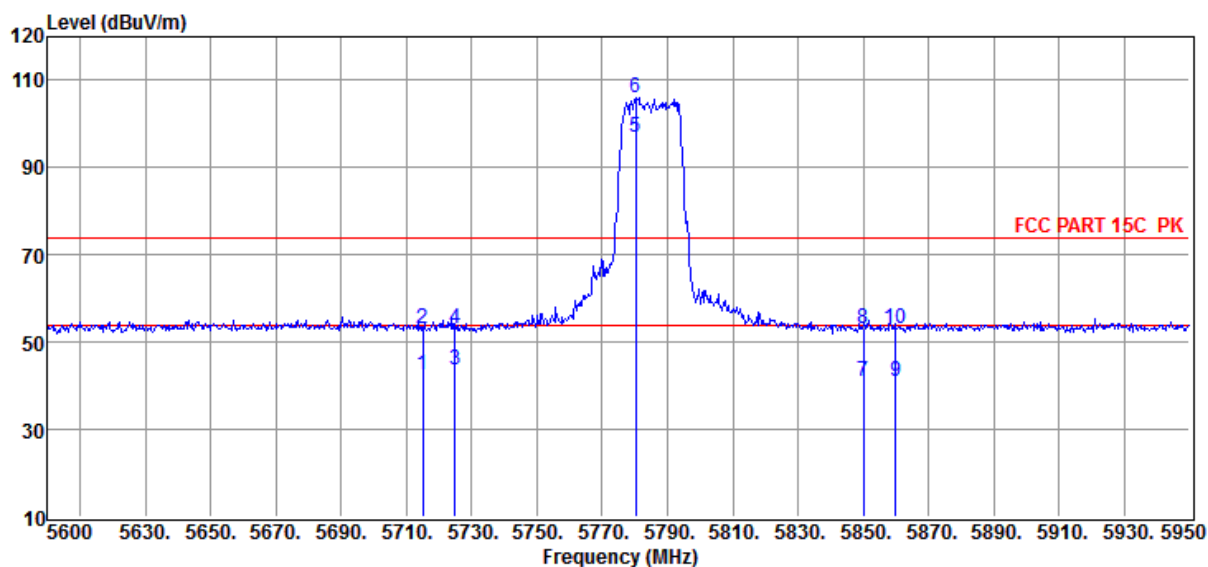
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11N20 5785

Data: 153



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.21	35.59	43.37	8.03	42.46	89.4	-46.94	Average	VERTICAL
2	5715.00	52.93	35.59	43.37	8.03	53.18	109.4	-56.22	Peak	VERTICAL
3	5725.00	43.26	35.59	43.37	8.04	43.52	102.2	-58.68	Average	VERTICAL
4	5725.00	52.87	35.59	43.37	8.04	53.13	122.2	-69.07	Peak	VERTICAL
5	5780.25	96.45	35.61	43.33	8.07	96.80	105.2	-8.40	Average	VERTICAL
6	5780.25	105.53	35.61	43.33	8.07	105.88	125.2	-19.32	Peak	VERTICAL
7	5850.00	40.66	35.64	43.29	8.12	41.13	102.2	-61.07	Average	VERTICAL
8	5850.00	52.47	35.64	43.29	8.12	52.94	122.2	-69.26	Peak	VERTICAL
9	5860.00	40.52	35.64	43.28	8.12	41.00	89.4	-48.40	Average	VERTICAL
10	5860.00	52.74	35.64	43.28	8.12	53.22	109.4	-56.18	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

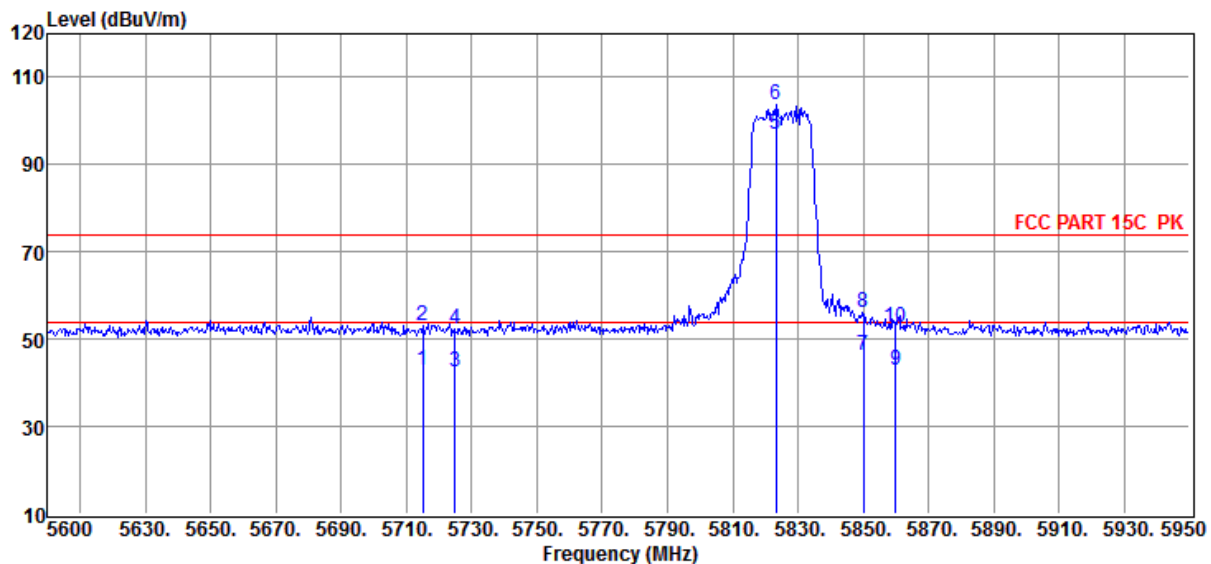
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11N20 5825

Data: 155



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.63	35.59	43.37	8.03	42.88	89.4	-46.52	Average	HORIZONTAL
2	5715.00	52.67	35.59	43.37	8.03	52.92	109.4	-56.48	Peak	HORIZONTAL
3	5725.00	42.37	35.59	43.37	8.04	42.63	102.2	-59.57	Average	HORIZONTAL
4	5725.00	52.06	35.59	43.37	8.04	52.32	122.2	-69.88	Peak	HORIZONTAL
5	5823.30	96.35	35.63	43.31	8.10	96.77	105.2	-8.43	Average	HORIZONTAL
6	5823.30	103.31	35.63	43.31	8.10	103.73	125.2	-21.47	Peak	HORIZONTAL
7	5850.00	45.68	35.64	43.29	8.12	46.15	102.2	-56.05	Average	HORIZONTAL
8	5850.00	55.63	35.64	43.29	8.12	56.10	122.2	-66.10	Peak	HORIZONTAL
9	5860.00	42.36	35.64	43.28	8.12	42.84	89.4	-46.56	Average	HORIZONTAL
10	5860.00	52.17	35.64	43.28	8.12	52.65	109.4	-56.75	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

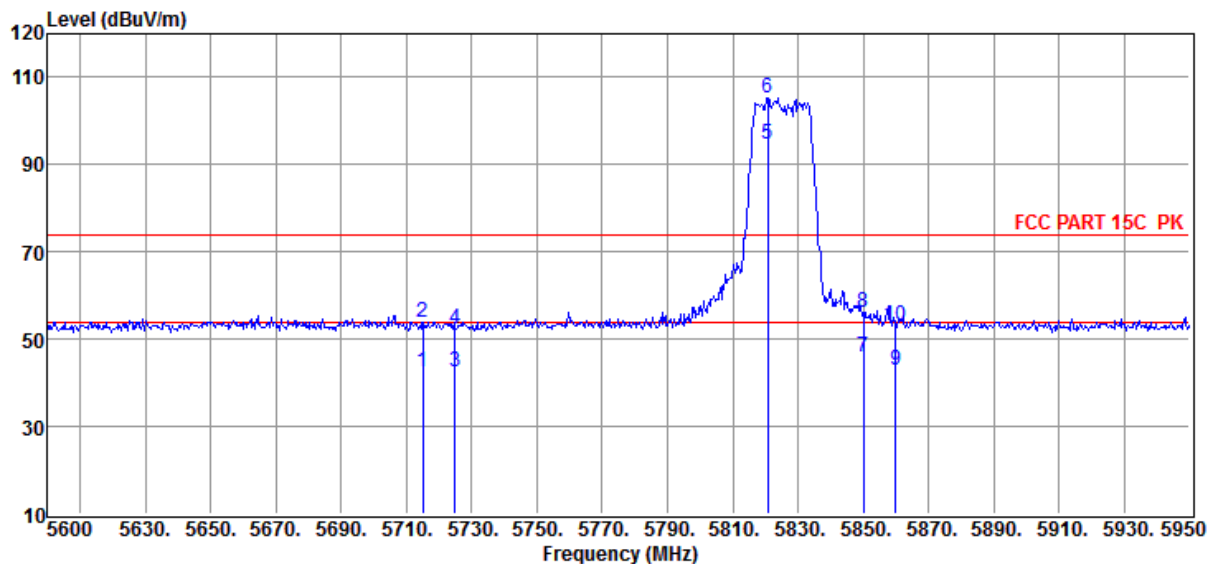
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11N20 5825

Data: 156



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.36	35.59	43.37	8.03	42.61	89.4	-46.79	Average	VERTICAL
2	5715.00	53.65	35.59	43.37	8.03	53.90	109.4	-55.50	Peak	VERTICAL
3	5725.00	42.32	35.59	43.37	8.04	42.58	102.2	-59.62	Average	VERTICAL
4	5725.00	52.08	35.59	43.37	8.04	52.34	122.2	-69.86	Peak	VERTICAL
5	5820.85	94.32	35.63	43.31	8.10	94.74	105.2	-10.46	Average	VERTICAL
6	5820.85	104.77	35.63	43.31	8.10	105.19	125.2	-20.01	Peak	VERTICAL
7	5850.00	45.62	35.64	43.29	8.12	46.09	102.2	-56.11	Average	VERTICAL
8	5850.00	55.58	35.64	43.29	8.12	56.05	122.2	-66.15	Peak	VERTICAL
9	5860.00	42.33	35.64	43.28	8.12	42.81	89.4	-46.59	Average	VERTICAL
10	5860.00	52.79	35.64	43.28	8.12	53.27	109.4	-56.13	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

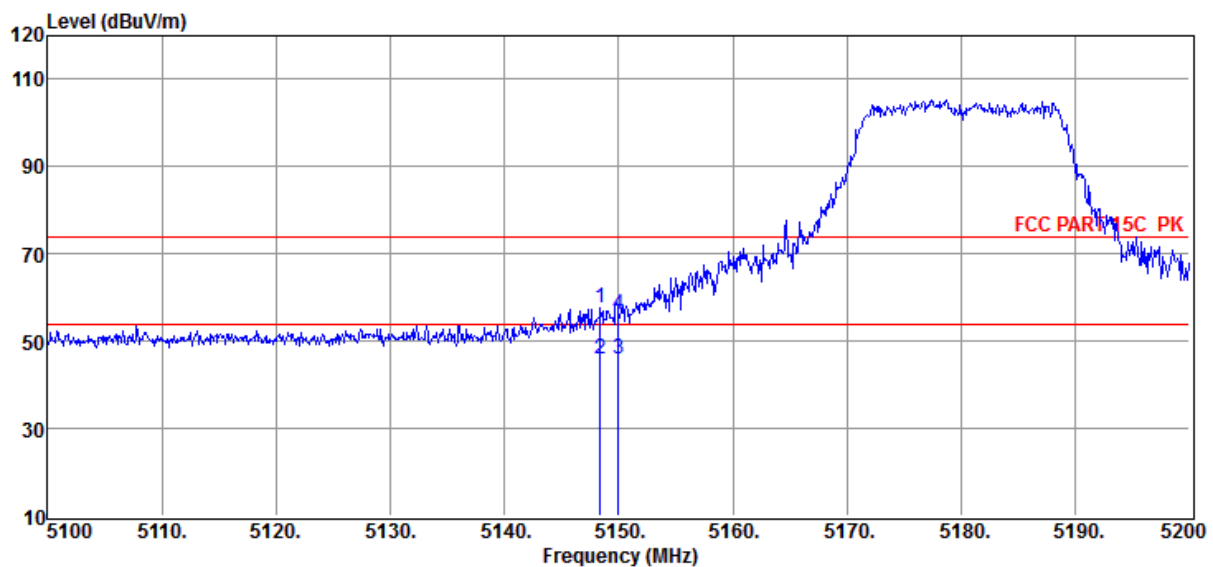
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11AC20 5180

Data: 158



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5148.40	58.67	35.15	43.71	7.67	57.78	74.00	-16.22	Peak	HORIZONTAL
2	5148.40	46.79	35.15	43.71	7.67	45.90	74.00	-28.10	QP	HORIZONTAL
3	5150.00	46.86	35.15	43.71	7.67	45.97	54.00	-8.03	Average	HORIZONTAL
4	5150.00	57.15	35.15	43.71	7.67	56.26	74.00	-17.74	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

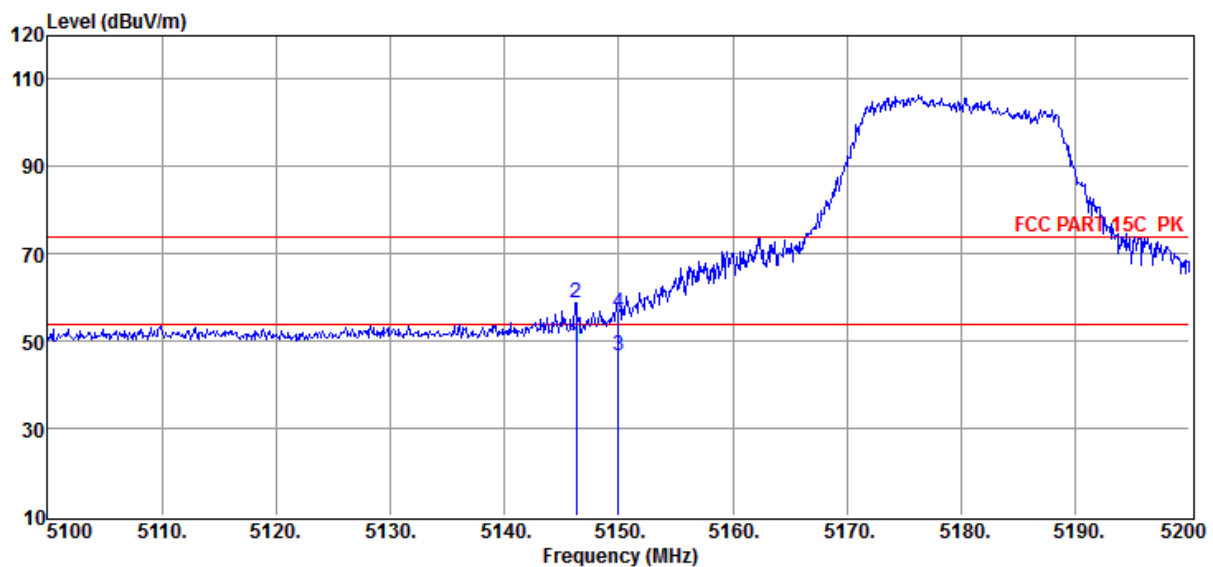
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC20 5180

Data: 157



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5146.30	49.65	35.15	43.71	7.67	48.76	54.00	-5.24	Average	VERTICAL
2	5146.30	59.70	35.15	43.71	7.67	58.81	74.00	-15.19	Peak	VERTICAL
3	5150.00	47.66	35.15	43.71	7.67	46.77	54.00	-7.23	Average	VERTICAL
4	5150.00	57.45	35.15	43.71	7.67	56.56	74.00	-17.44	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

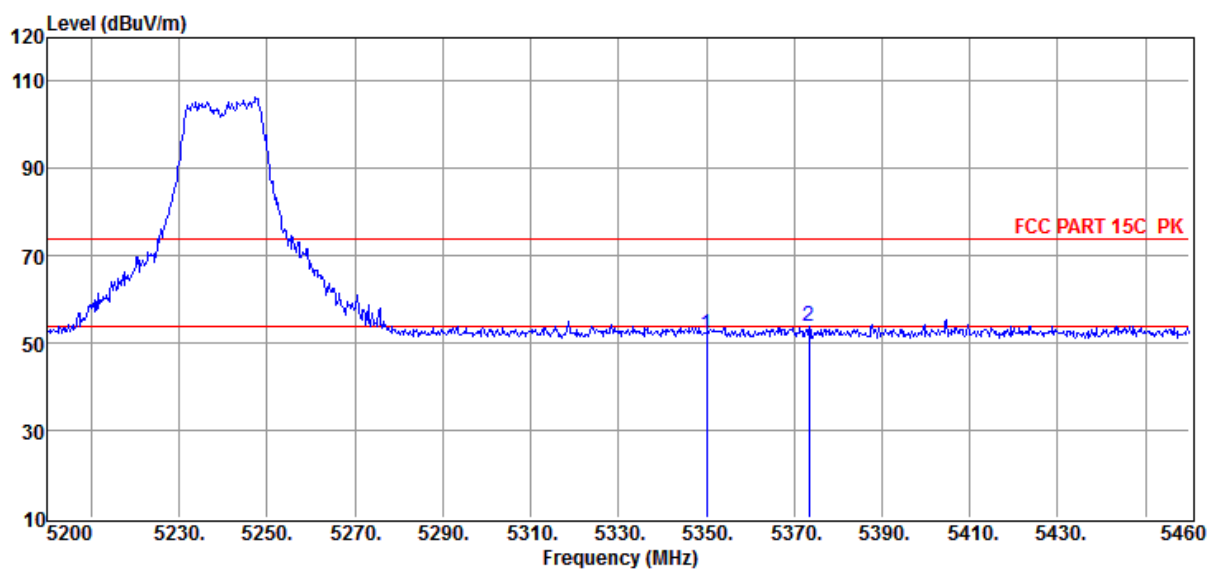
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11AC20 5240

Data: 159



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5350.02	52.57	35.35	43.59	7.80	52.13	74.00	-21.87	Peak	HORIZONTAL
2	5373.42	54.27	35.37	43.58	7.82	53.88	74.00	-20.12	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

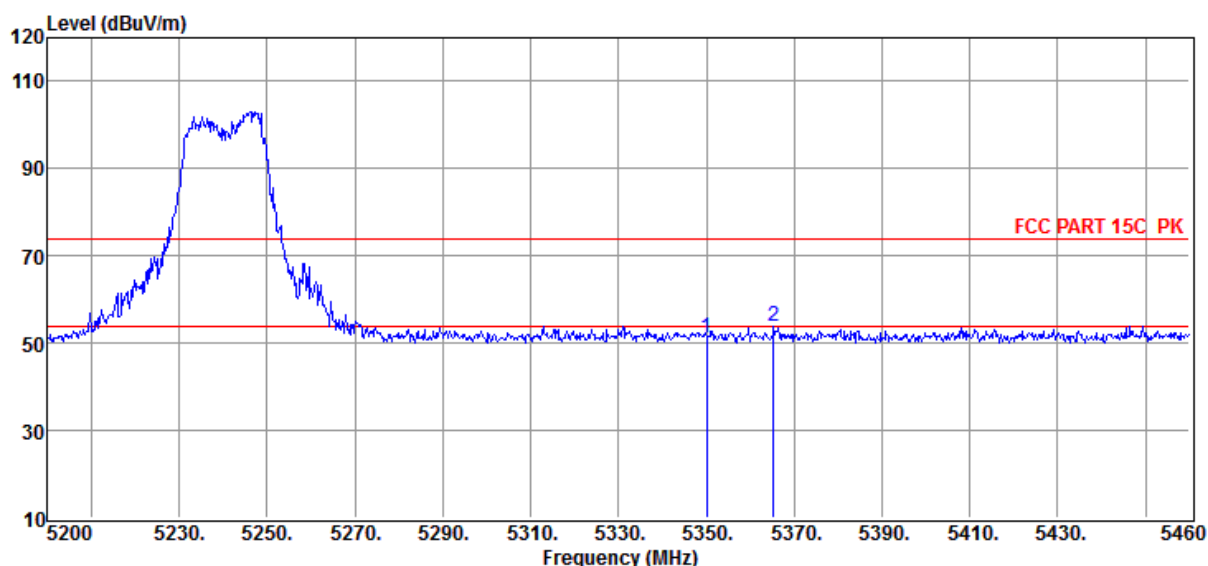
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC20 5240

Data: 160



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5350.02	51.54	35.35	43.59	7.80	51.10	74.00	-22.90	Peak	VERTICAL
2	5365.36	54.07	35.37	43.58	7.81	53.67	74.00	-20.33	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

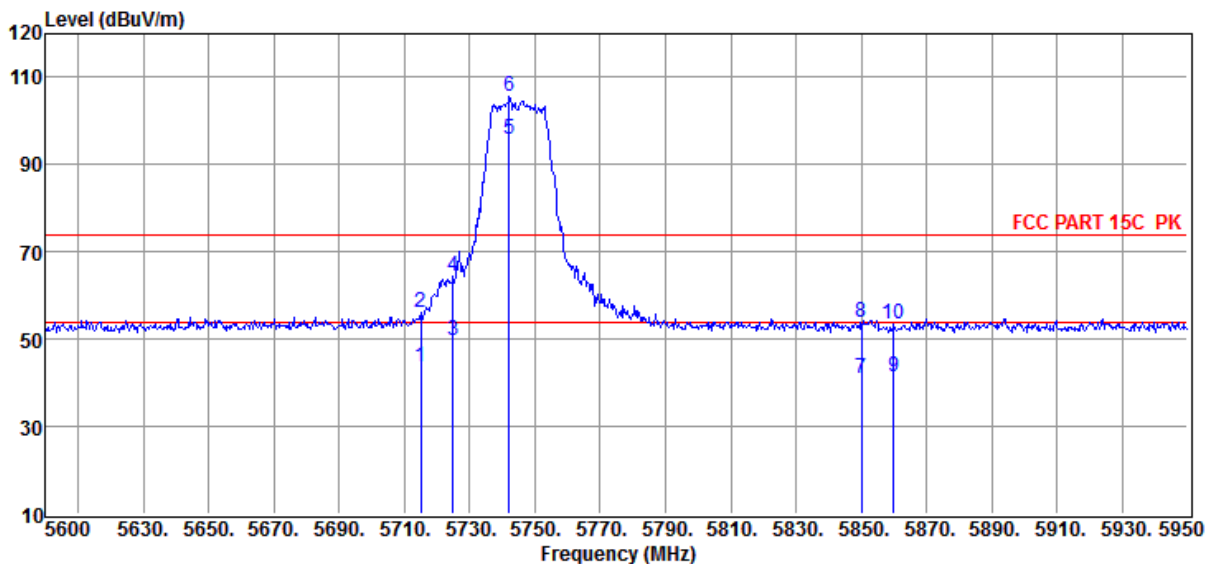
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11AC20 5745

Data: 162



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	43.25	35.59	43.37	8.03	43.50	89.4	-45.90	Average	HORIZONTAL
2	5715.00	55.75	35.59	43.37	8.03	56.00	109.4	-53.40	Peak	HORIZONTAL
3	5725.00	49.58	35.59	43.37	8.04	49.84	102.2	-52.36	Average	HORIZONTAL
4	5725.00	64.11	35.59	43.37	8.04	64.37	122.2	-57.83	Peak	HORIZONTAL
5	5742.10	95.36	35.60	43.35	8.05	95.66	105.2	-9.54	Average	HORIZONTAL
6	5742.10	105.20	35.60	43.35	8.05	105.50	125.2	-19.70	Peak	HORIZONTAL
7	5850.00	40.36	35.64	43.29	8.12	40.83	102.2	-61.37	Average	HORIZONTAL
8	5850.00	53.28	35.64	43.29	8.12	53.75	122.2	-68.45	Peak	HORIZONTAL
9	5860.00	40.75	35.64	43.28	8.12	41.23	89.4	-48.17	Average	HORIZONTAL
10	5860.00	53.04	35.64	43.28	8.12	53.52	109.4	-55.88	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

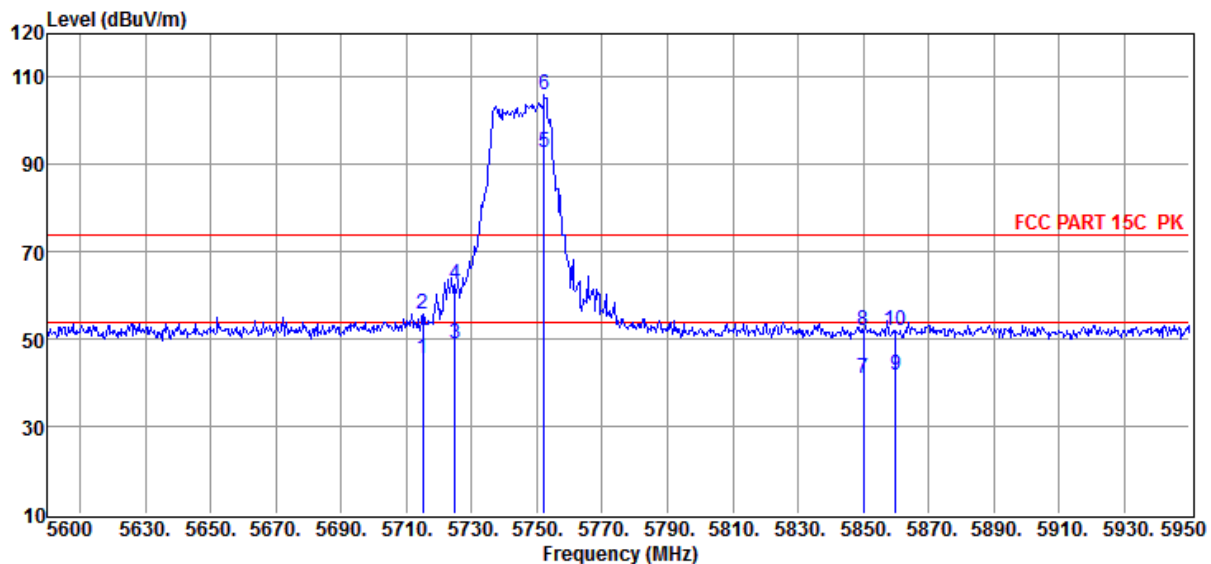
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC20 5745

Data: 161



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	45.32	35.59	43.37	8.03	45.57	89.4	-43.83	Average	VERTICAL
2	5715.00	55.48	35.59	43.37	8.03	55.73	109.4	-53.67	Peak	VERTICAL
3	5725.00	48.65	35.59	43.37	8.04	48.91	102.2	-53.29	Average	VERTICAL
4	5725.00	62.34	35.59	43.37	8.04	62.60	122.2	-59.60	Peak	VERTICAL
5	5752.25	92.37	35.60	43.35	8.05	92.67	105.2	-12.53	Average	VERTICAL
6	5752.25	105.57	35.60	43.35	8.05	105.87	125.2	-19.33	Peak	VERTICAL
7	5850.00	40.63	35.64	43.29	8.12	41.10	102.2	-61.10	Average	VERTICAL
8	5850.00	51.57	35.64	43.29	8.12	52.04	122.2	-70.16	Peak	VERTICAL
9	5860.00	41.35	35.64	43.28	8.12	41.83	89.4	-47.57	Average	VERTICAL
10	5860.00	51.62	35.64	43.28	8.12	52.10	109.4	-57.30	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

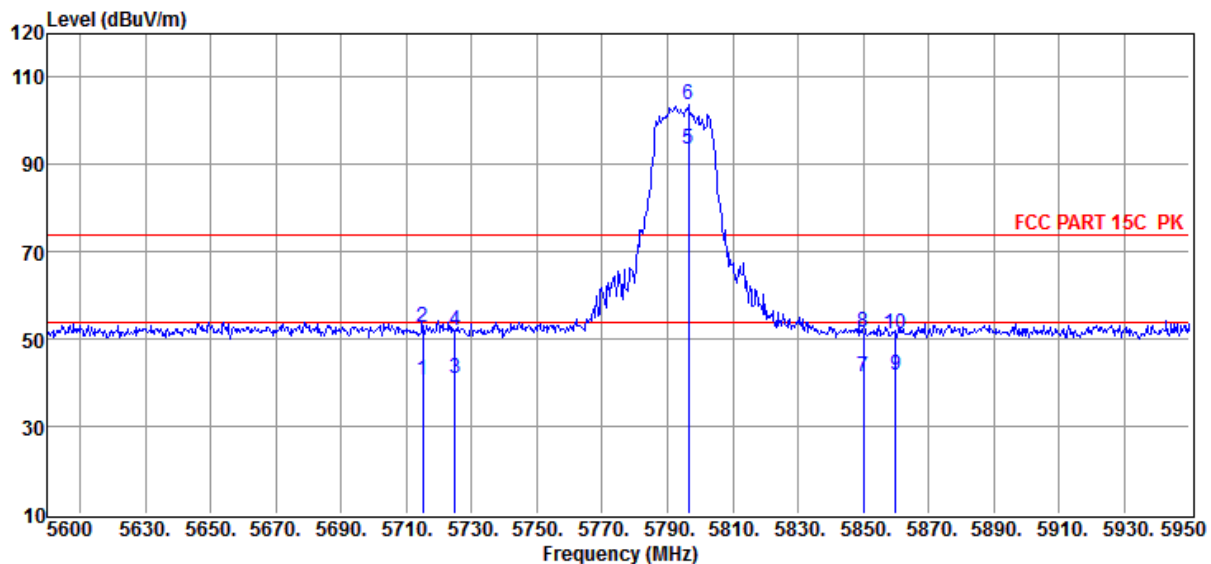
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11AC20 5795

Data: 163



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	40.36	35.59	43.37	8.03	40.61	89.4	-48.79	Average	HORIZONTAL
2	5715.00	52.61	35.59	43.37	8.03	52.86	109.4	-56.54	Peak	HORIZONTAL
3	5725.00	40.75	35.59	43.37	8.04	41.01	102.2	-61.19	Average	HORIZONTAL
4	5725.00	51.53	35.59	43.37	8.04	51.79	122.2	-70.41	Peak	HORIZONTAL
5	5796.35	93.32	35.62	43.32	8.08	93.70	105.2	-11.50	Average	HORIZONTAL
6	5796.35	103.49	35.62	43.32	8.08	103.87	125.2	-21.33	Peak	HORIZONTAL
7	5850.00	40.74	35.64	43.29	8.12	41.21	102.2	-60.99	Average	HORIZONTAL
8	5850.00	51.05	35.64	43.29	8.12	51.52	122.2	-70.68	Peak	HORIZONTAL
9	5860.00	41.22	35.64	43.28	8.12	41.70	89.4	-47.70	Average	HORIZONTAL
10	5860.00	50.63	35.64	43.28	8.12	51.11	109.4	-58.29	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

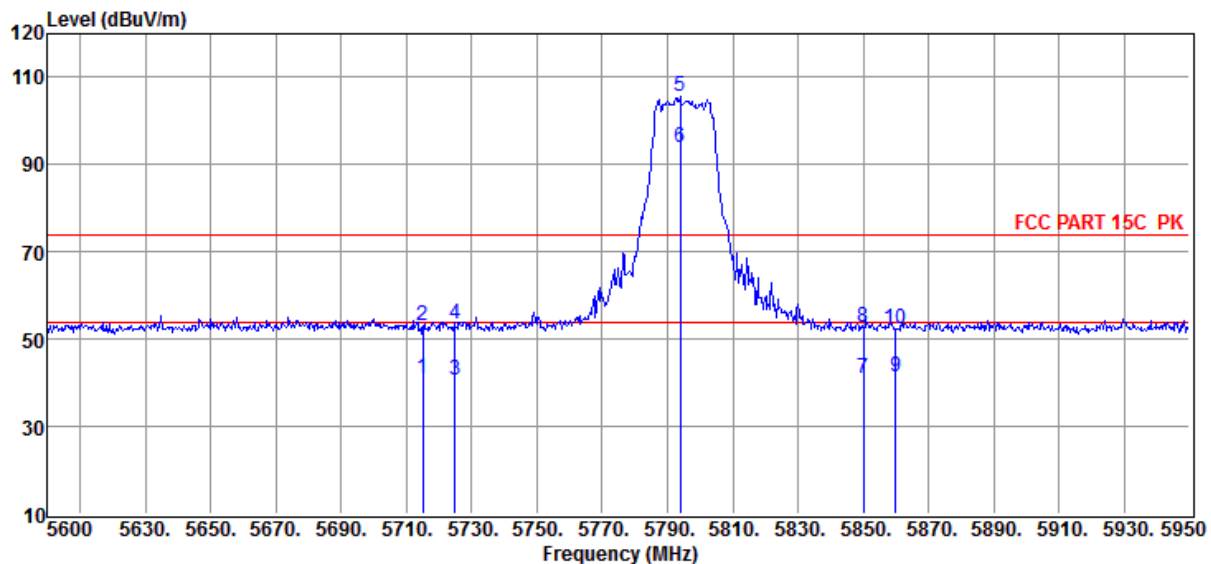
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC20 5795

Data: 164



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	40.66	35.59	43.37	8.03	40.91	89.4	-48.49	Average	VERTICAL
2	5715.00	52.73	35.59	43.37	8.03	52.98	109.4	-56.42	Peak	VERTICAL
3	5725.00	40.54	35.59	43.37	8.04	40.80	102.2	-61.40	Average	VERTICAL
4	5725.00	53.18	35.59	43.37	8.04	53.44	122.2	-68.76	Peak	VERTICAL
5	5793.90	105.15	35.62	43.32	8.08	105.53	125.2	-19.67	Peak	VERTICAL
6	5793.90	93.45	35.62	43.32	8.08	93.83	105.2	-11.37	Average	VERTICAL
7	5850.00	40.36	35.64	43.29	8.12	40.83	102.2	-61.37	Average	VERTICAL
8	5850.00	52.19	35.64	43.29	8.12	52.66	122.2	-69.54	Peak	VERTICAL
9	5860.00	40.86	35.64	43.28	8.12	41.34	89.4	-48.06	Average	VERTICAL
10	5860.00	51.84	35.64	43.28	8.12	52.32	109.4	-57.08	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

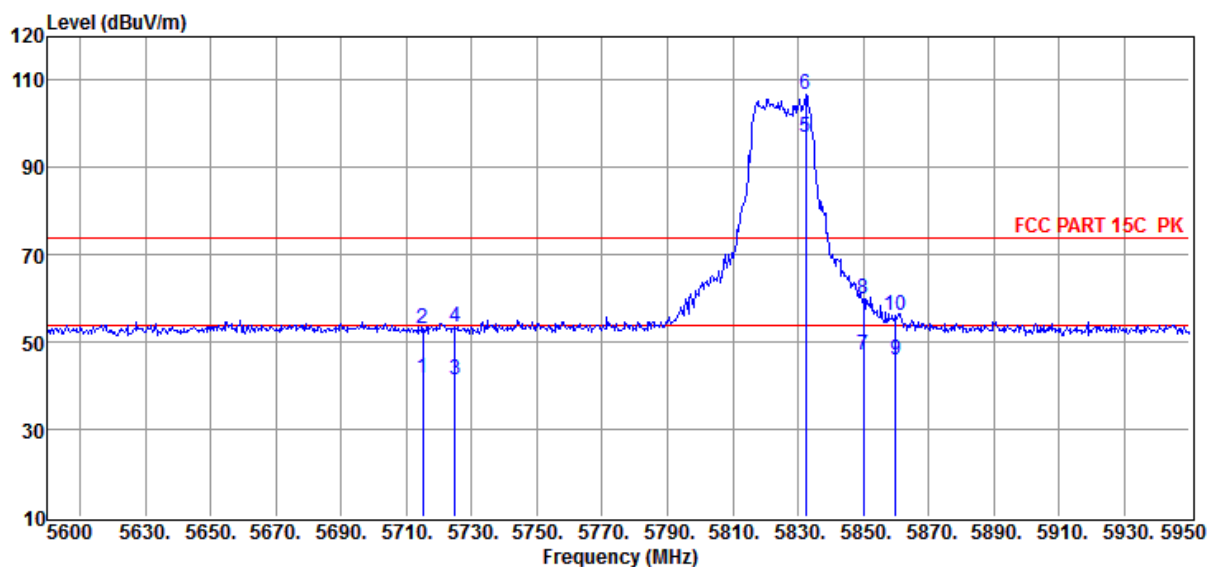
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11AC20 5825

Data: 166



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5715.00	41.32	35.59	43.37	8.03	41.57	89.4	-47.83	Average	HORIZONTAL
2	5715.00	52.93	35.59	43.37	8.03	53.18	109.4	-56.22	Peak	HORIZONTAL
3	5725.00	41.24	35.59	43.37	8.04	41.50	102.2	-60.70	Average	HORIZONTAL
4	5725.00	53.35	35.59	43.37	8.04	53.61	122.2	-68.59	Peak	HORIZONTAL
5	5832.40	96.33	35.63	43.30	8.10	96.76	105.2	-8.44	Average	HORIZONTAL
6	5832.40	106.19	35.63	43.30	8.10	106.62	125.2	-18.58	Peak	HORIZONTAL
7	5850.00	46.75	35.64	43.29	8.12	47.22	102.2	-54.98	Average	HORIZONTAL
8	5850.00	59.33	35.64	43.29	8.12	59.80	122.2	-62.40	Peak	HORIZONTAL
9	5860.00	45.35	35.64	43.28	8.12	45.83	89.4	-43.57	Average	HORIZONTAL
10	5860.00	55.48	35.64	43.28	8.12	55.96	109.4	-53.44	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

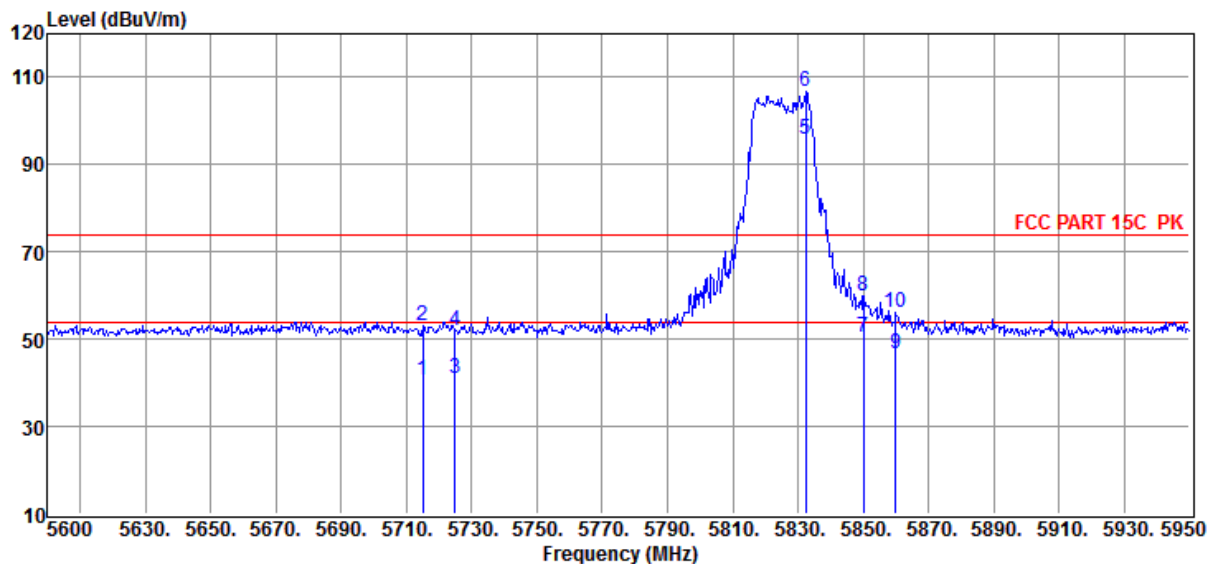
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC20 5825

Data: 165



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5715.00	40.36	35.59	43.37	8.03	40.61	89.4	-48.79	Average	VERTICAL
2	5715.00	52.93	35.59	43.37	8.03	53.18	109.4	-56.22	Peak	VERTICAL
3	5725.00	40.75	35.59	43.37	8.04	41.01	102.2	-61.19	Average	VERTICAL
4	5725.00	51.56	35.59	43.37	8.04	51.82	122.2	-70.38	Peak	VERTICAL
5	5832.40	95.33	35.63	43.30	8.10	95.76	105.2	-9.44	Average	VERTICAL
6	5832.40	106.19	35.63	43.30	8.10	106.62	125.2	-18.58	Peak	VERTICAL
7	5850.00	49.85	35.64	43.29	8.12	50.32	102.2	-51.88	Average	VERTICAL
8	5850.00	59.33	35.64	43.29	8.12	59.80	122.2	-62.40	Peak	VERTICAL
9	5860.00	46.36	35.64	43.28	8.12	46.84	89.4	-42.56	Average	VERTICAL
10	5860.00	55.48	35.64	43.28	8.12	55.96	109.4	-53.44	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

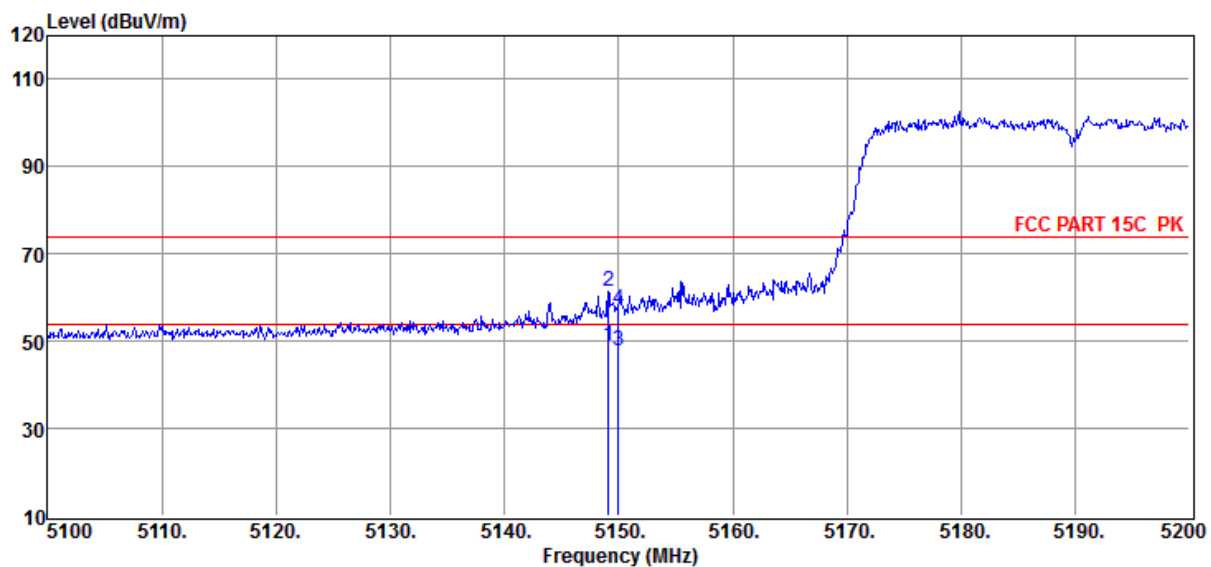
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11N40 5190

Data: 167



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5149.10	49.86	35.15	43.71	7.67	48.97	54.00	-5.03	Average	HORIZONTAL
2	5149.10	62.21	35.15	43.71	7.67	61.32	74.00	-12.68	Peak	HORIZONTAL
3	5150.00	48.66	35.15	43.71	7.67	47.77	54.00	-6.23	Average	HORIZONTAL
4	5150.00	58.18	35.15	43.71	7.67	57.29	74.00	-16.71	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

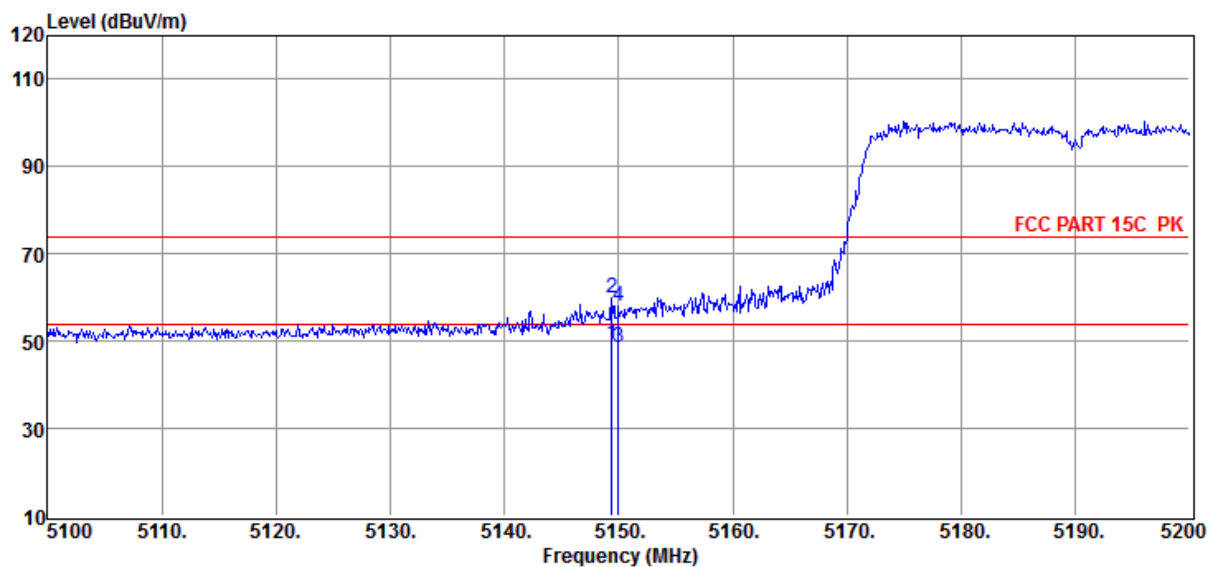
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11N40 5190

Data: 168



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5149.40	50.33	35.15	43.71	7.67	49.44	54.00	-4.56	Average	VERTICAL
2	5149.40	60.93	35.15	43.71	7.67	60.04	74.00	-13.96	Peak	VERTICAL
3	5150.00	49.54	35.15	43.71	7.67	48.65	54.00	-5.35	Average	VERTICAL
4	5150.00	58.85	35.15	43.71	7.67	57.96	74.00	-16.04	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

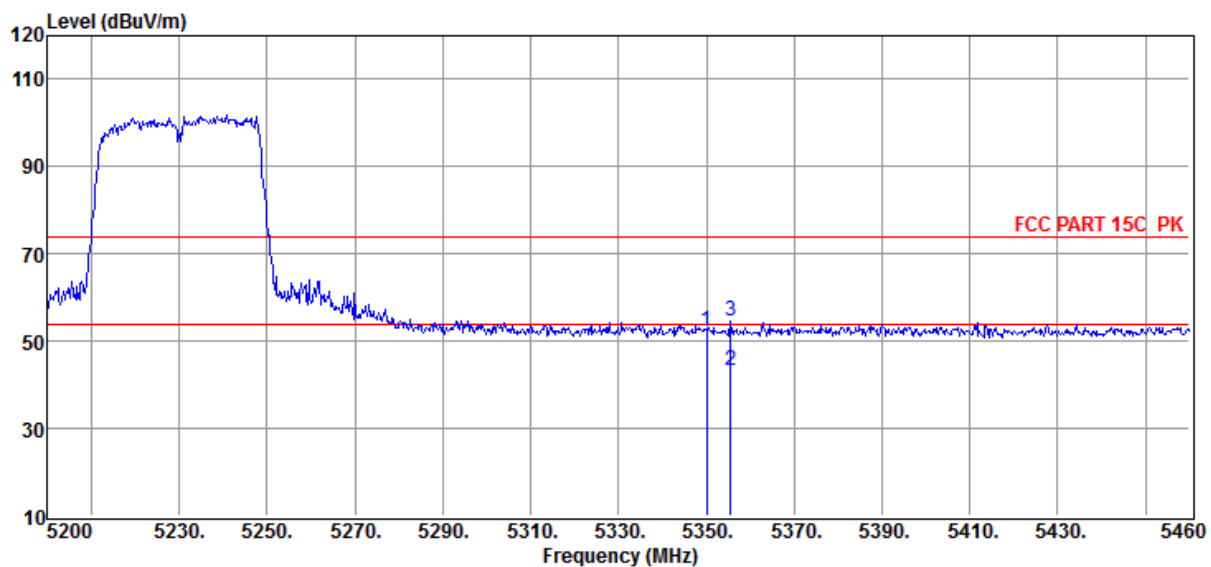
2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site	: DDT 3m Chamber 1#	D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6	
Test Date	: 2018-08-28	Tested By	: Talent
EUT	: Outdoor Access Point	Model Number	: WL8200-IT3
Power Supply	: DC 48V	Test Mode	: Tx mode
Condition	: Temp:24.5°C, Humi:55.5%, Press:100.1kPa	Antenna/Distance	: 2017 HF907/3m/HORIZONTAL
Memo	: 11N40 5230		

Data: 170



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.02	52.70	35.35	43.59	7.80	52.26	74.00	-21.74	Peak	HORIZONTAL
2	5355.48	43.65	35.36	43.59	7.80	43.22	54.00	-10.78	Average	HORIZONTAL
3	5355.48	55.22	35.36	43.59	7.80	54.79	74.00	-19.21	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

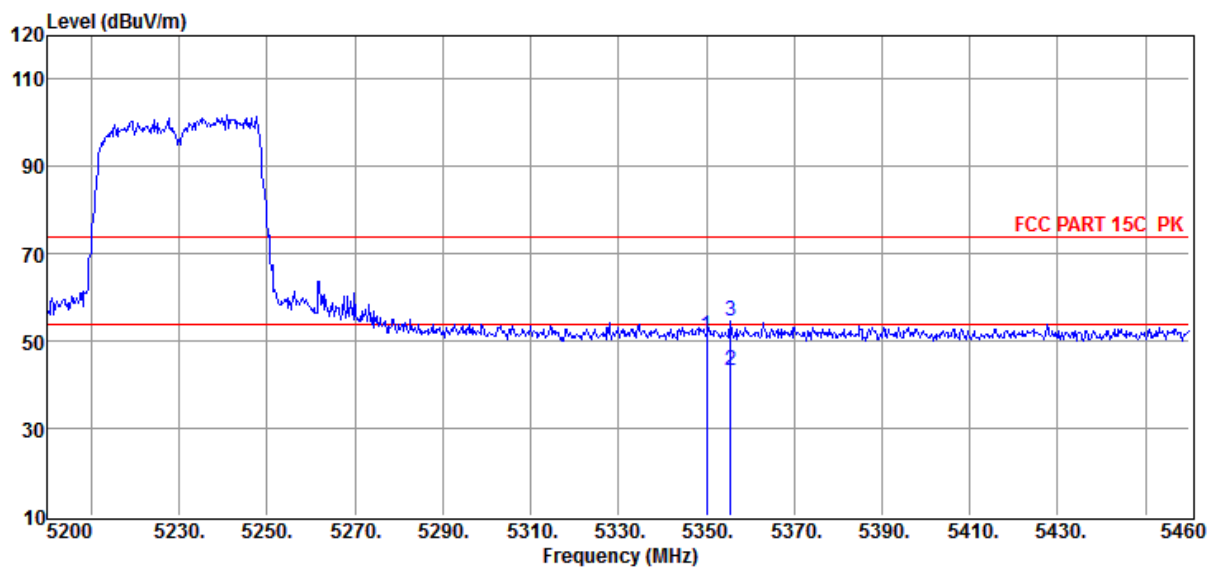
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11N40 5230

Data: 169



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5350.02	51.61	35.35	43.59	7.80	51.17	74.00	-22.83	Peak	VERTICAL
2	5355.48	43.57	35.36	43.59	7.80	43.14	54.00	-10.86	Average	VERTICAL
3	5355.48	55.22	35.36	43.59	7.80	54.79	74.00	-19.21	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

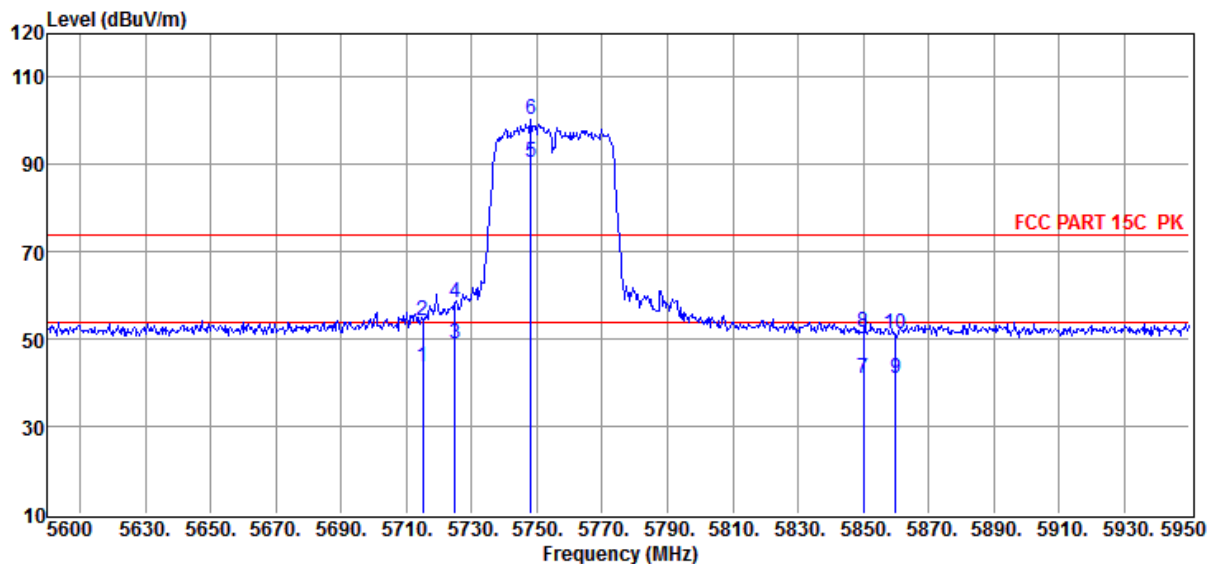
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11N40 5755

Data: 171



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	43.25	35.59	43.37	8.03	43.50	89.4	-45.90	Average	HORIZONTAL
2	5715.00	53.82	35.59	43.37	8.03	54.07	109.4	-55.33	Peak	HORIZONTAL
3	5725.00	48.65	35.59	43.37	8.04	48.91	102.2	-53.29	Average	HORIZONTAL
4	5725.00	58.21	35.59	43.37	8.04	58.47	122.2	-63.73	Peak	HORIZONTAL
5	5748.05	90.12	35.60	43.35	8.05	90.42	105.2	-14.78	Average	HORIZONTAL
6	5748.05	99.98	35.60	43.35	8.05	100.28	125.2	-24.92	Peak	HORIZONTAL
7	5850.00	40.36	35.64	43.29	8.12	40.83	102.2	-61.37	Average	HORIZONTAL
8	5850.00	51.03	35.64	43.29	8.12	51.50	122.2	-70.70	Peak	HORIZONTAL
9	5860.00	40.33	35.64	43.28	8.12	40.81	89.4	-48.59	Average	HORIZONTAL
10	5860.00	50.88	35.64	43.28	8.12	51.36	109.4	-58.04	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

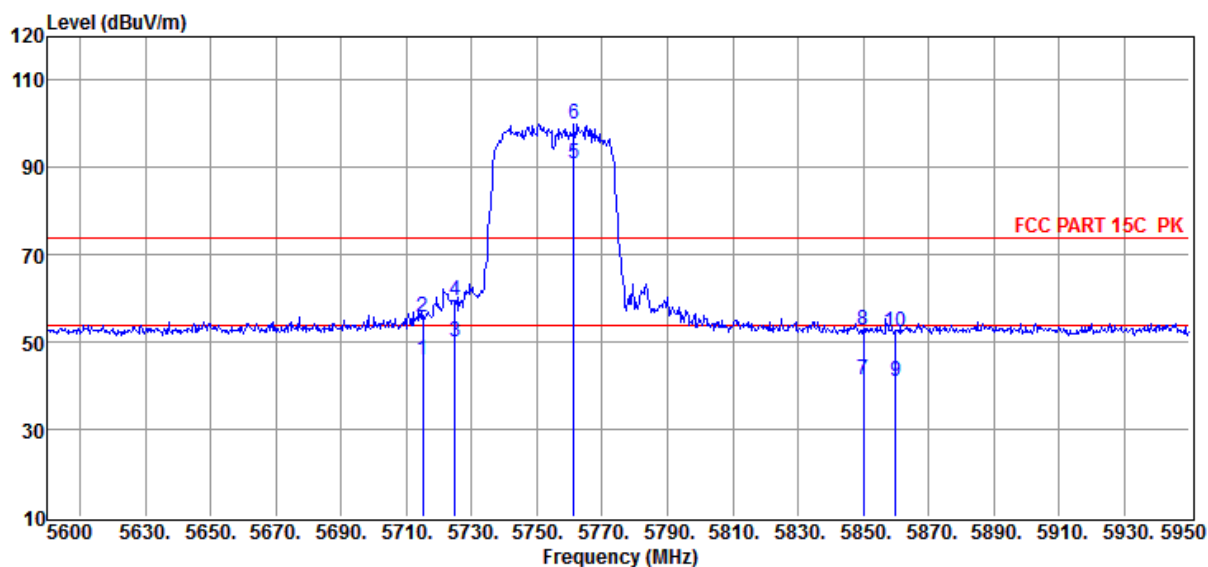
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11N40 5755

Data: 172



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	45.63	35.59	43.37	8.03	45.88	89.4	-43.52	Average	VERTICAL
2	5715.00	55.40	35.59	43.37	8.03	55.65	109.4	-53.75	Peak	VERTICAL
3	5725.00	49.66	35.59	43.37	8.04	49.92	102.2	-52.28	Average	VERTICAL
4	5725.00	59.15	35.59	43.37	8.04	59.41	122.2	-62.79	Peak	VERTICAL
5	5761.35	90.48	35.60	43.34	8.06	90.80	105.2	-14.40	Average	VERTICAL
6	5761.35	99.80	35.60	43.34	8.06	100.12	125.2	-25.08	Peak	VERTICAL
7	5850.00	40.95	35.64	43.29	8.12	41.42	102.2	-60.78	Average	VERTICAL
8	5850.00	52.13	35.64	43.29	8.12	52.60	122.2	-69.60	Peak	VERTICAL
9	5860.00	40.65	35.64	43.28	8.12	41.13	89.4	-48.27	Average	VERTICAL
10	5860.00	52.02	35.64	43.28	8.12	52.50	109.4	-56.90	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

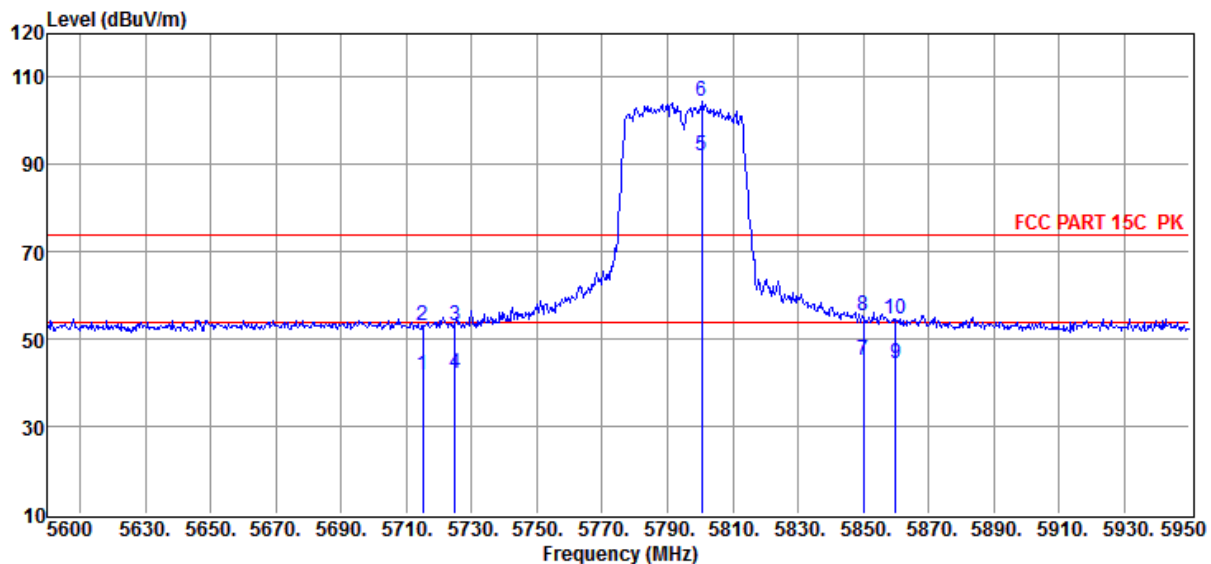
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11N40 5795

Data: 174



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5715.00	41.55	35.59	43.37	8.03	41.80	89.4	-47.60	Average	HORIZONTAL
2	5715.00	52.91	35.59	43.37	8.03	53.16	109.4	-56.24	Peak	HORIZONTAL
3	5725.00	52.71	35.59	43.37	8.04	52.97	122.2	-69.23	Peak	HORIZONTAL
4	5725.00	41.76	35.59	43.37	8.04	42.02	102.2	-60.18	Average	HORIZONTAL
5	5800.55	91.79	35.62	43.32	8.08	92.17	105.2	-13.03	Average	HORIZONTAL
6	5800.55	104.26	35.62	43.32	8.08	104.64	125.2	-20.56	Peak	HORIZONTAL
7	5850.00	44.65	35.64	43.29	8.12	45.12	102.2	-57.08	Average	HORIZONTAL
8	5850.00	54.74	35.64	43.29	8.12	55.21	122.2	-66.99	Peak	HORIZONTAL
9	5860.00	43.76	35.64	43.28	8.12	44.24	89.4	-45.16	Average	HORIZONTAL
10	5860.00	54.03	35.64	43.28	8.12	54.51	109.4	-54.89	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

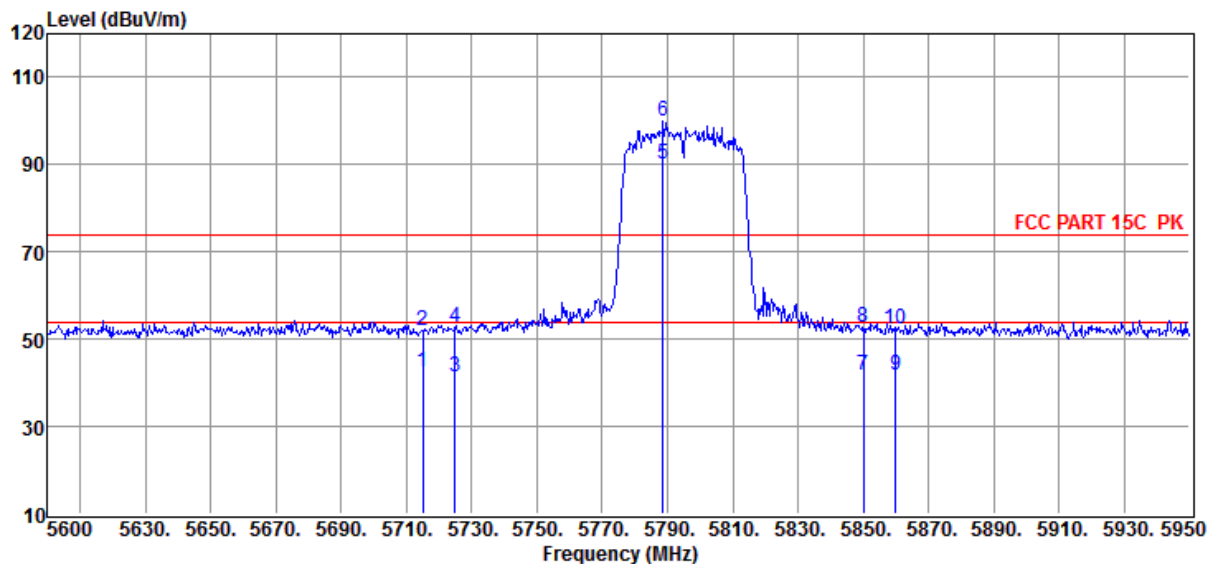
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11N40 5795

Data: 173



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.23	35.59	43.37	8.03	42.48	89.4	-46.92	Average	VERTICAL
2	5715.00	51.83	35.59	43.37	8.03	52.08	109.4	-57.32	Peak	VERTICAL
3	5725.00	40.97	35.59	43.37	8.04	41.23	102.2	-60.97	Average	VERTICAL
4	5725.00	52.59	35.59	43.37	8.04	52.85	122.2	-69.35	Peak	VERTICAL
5	5788.65	89.65	35.62	43.33	8.08	90.02	105.2	-15.18	Average	VERTICAL
6	5788.65	99.69	35.62	43.33	8.08	100.06	125.2	-25.14	Peak	VERTICAL
7	5850.00	41.32	35.64	43.29	8.12	41.79	102.2	-60.41	Average	VERTICAL
8	5850.00	52.18	35.64	43.29	8.12	52.65	122.2	-69.55	Peak	VERTICAL
9	5860.00	41.30	35.64	43.28	8.12	41.78	89.4	-47.62	Average	VERTICAL
10	5860.00	51.78	35.64	43.28	8.12	52.26	109.4	-57.14	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

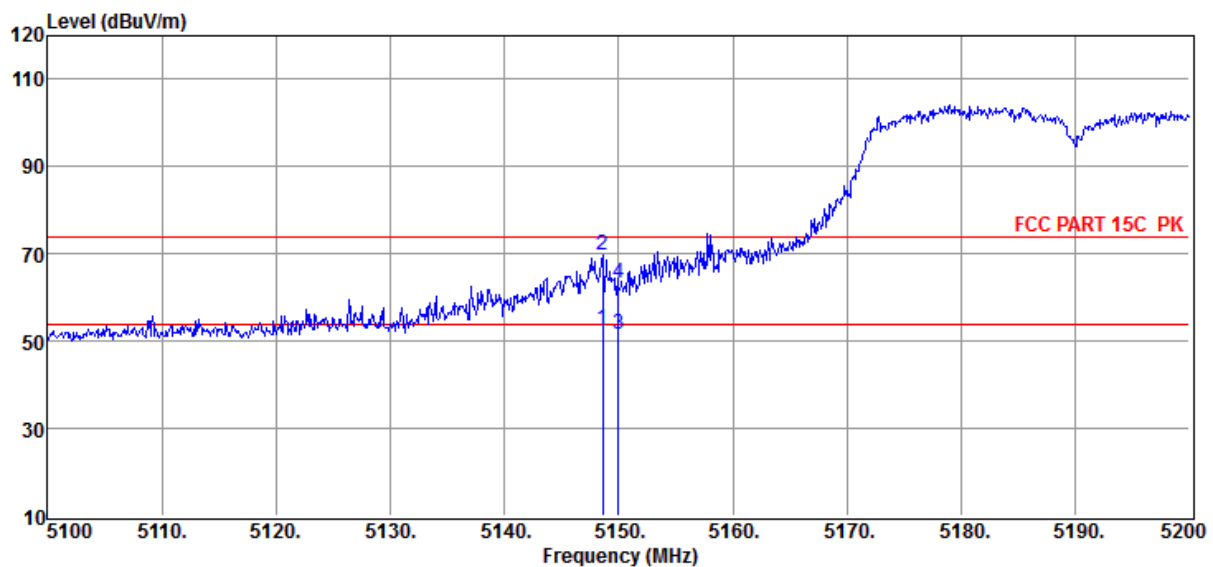
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11AC40 5190

Data: 175



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5148.60	53.65	35.15	43.71	7.67	52.76	54.00	-1.24	Average	HORIZONTAL
2	5148.60	70.61	35.15	43.71	7.67	69.72	74.00	-4.28	Peak	HORIZONTAL
3	5150.00	52.64	35.15	43.71	7.67	51.75	54.00	-2.25	Average	HORIZONTAL
4	5150.00	64.03	35.15	43.71	7.67	63.14	74.00	-10.86	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

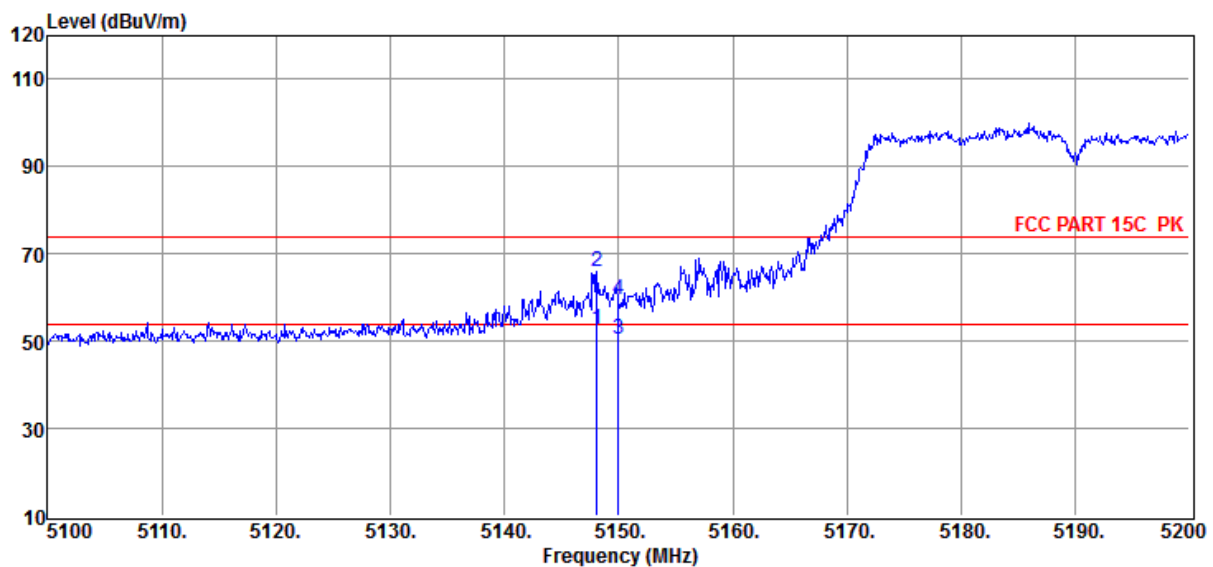
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC40 5190

Data: 176



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5148.10	53.63	35.15	43.71	7.67	52.74	54.00	-1.26	Average	VERTICAL
2	5148.10	66.84	35.15	43.71	7.67	65.95	74.00	-8.05	Peak	VERTICAL
3	5150.00	51.37	35.15	43.71	7.67	50.48	54.00	-3.52	Average	VERTICAL
4	5150.00	60.29	35.15	43.71	7.67	59.40	74.00	-14.60	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

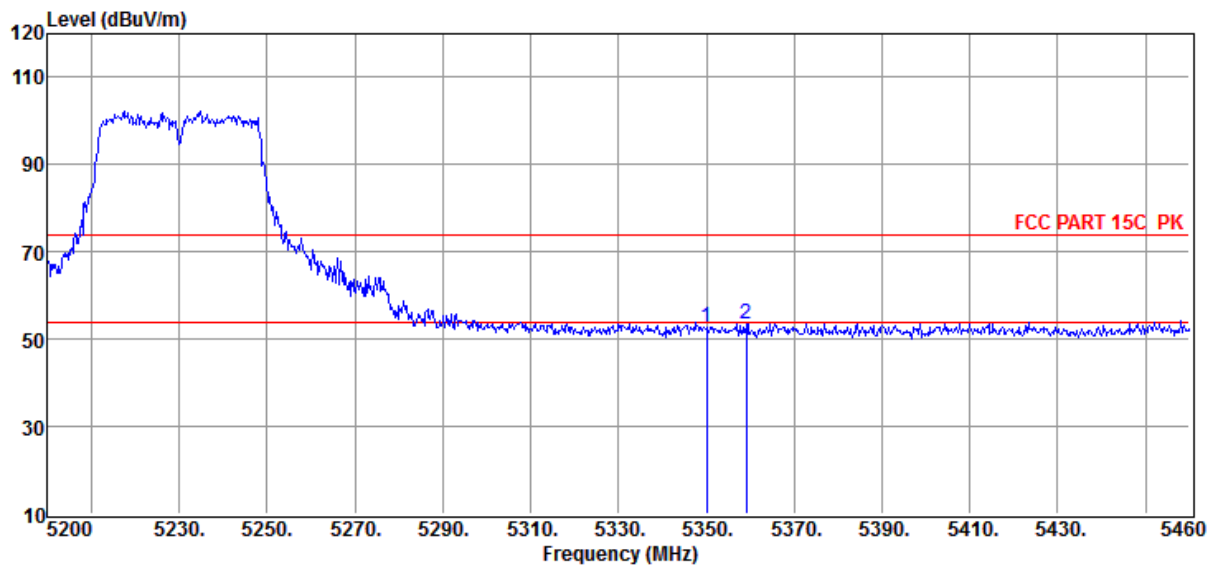
3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#
Test Date : 2018-08-28
EUT : Outdoor Access Point
Power Supply : DC 48V
Condition : Temp:24.5°C, Humi:55.5%,
 Press:100.1kPa
Memo : 11AC40 5230

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6
Tested By : Talent
Model Number : WL8200-IT3
Test Mode : Tx mode
Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Data: 178



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5350.02	52.97	35.35	43.59	7.80	52.53	74.00	-21.47	Peak	HORIZONTAL
2	5359.12	54.00	35.36	43.58	7.81	53.59	74.00	-20.41	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.
 2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.
 3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

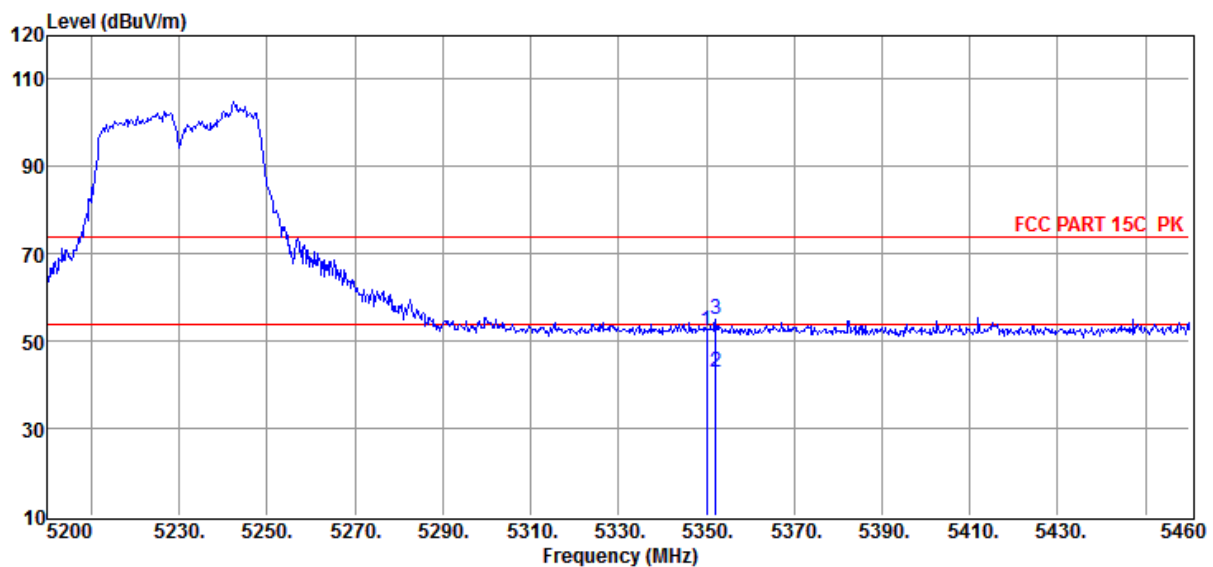
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC40 5230

Data: 177



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5350.02	52.70	35.35	43.59	7.80	52.26	74.00	-21.74	Peak	VERTICAL
2	5352.10	43.26	35.35	43.59	7.80	42.82	54.00	-11.18	Average	VERTICAL
3	5352.10	55.32	35.35	43.59	7.80	54.88	74.00	-19.12	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

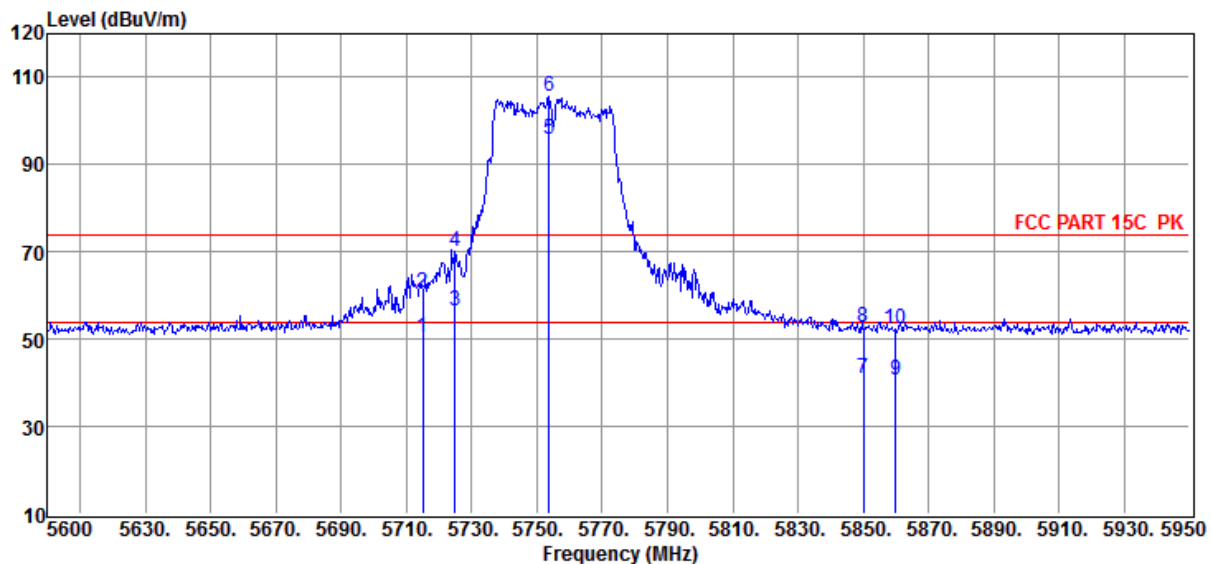
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11AC40 5755

Data: 179



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV /m)	Over Limit (dB)	Detector	Polarization
1	5715.00	50.36	35.59	43.37	8.03	50.61	89.4	-38.79	Average	HORIZONTAL
2	5715.00	60.29	35.59	43.37	8.03	60.54	109.4	-48.86	Peak	HORIZONTAL
3	5725.00	56.32	35.59	43.37	8.04	56.58	102.2	-45.62	Average	HORIZONTAL
4	5725.00	69.97	35.59	43.37	8.04	70.23	122.2	-51.97	Peak	HORIZONTAL
5	5753.65	95.66	35.60	43.35	8.05	95.96	105.2	-9.24	Average	HORIZONTAL
6	5753.65	105.18	35.60	43.35	8.05	105.48	125.2	-19.72	Peak	HORIZONTAL
7	5850.00	40.36	35.64	43.29	8.12	40.83	102.2	-61.37	Average	HORIZONTAL
8	5850.00	52.10	35.64	43.29	8.12	52.57	122.2	-69.63	Peak	HORIZONTAL
9	5860.00	40.32	35.64	43.28	8.12	40.80	89.4	-48.60	Average	HORIZONTAL
10	5860.00	51.76	35.64	43.28	8.12	52.24	109.4	-57.16	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

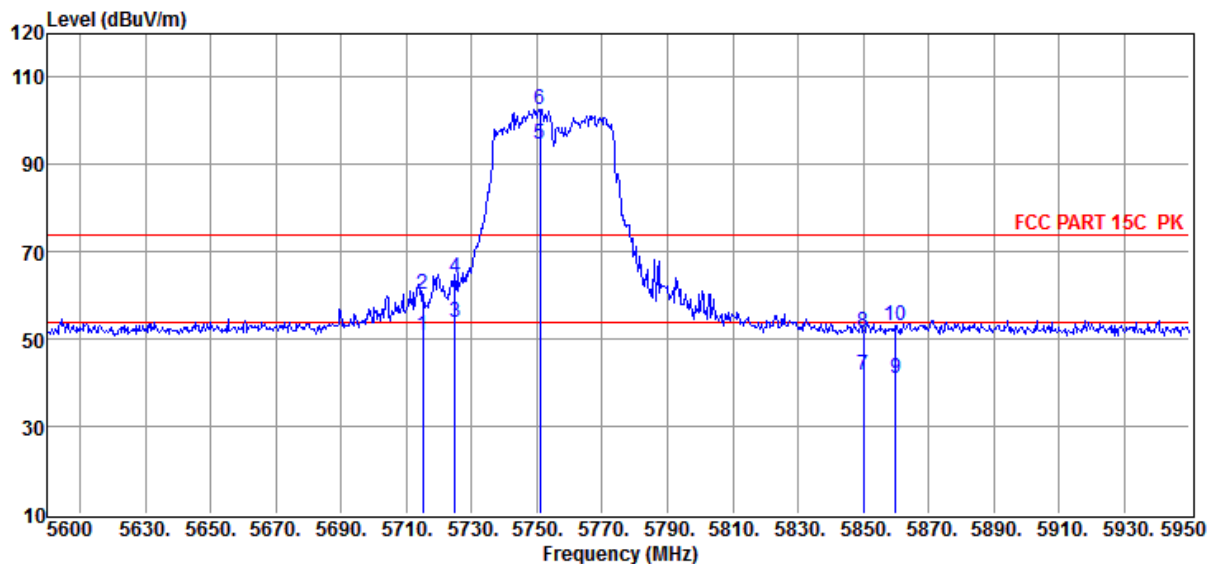
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC40 5755

Data: 180



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	50.66	35.59	43.37	8.03	50.91	89.4	-38.49	Average	VERTICAL
2	5715.00	60.10	35.59	43.37	8.03	60.35	109.4	-49.05	Peak	VERTICAL
3	5725.00	53.65	35.59	43.37	8.04	53.91	102.2	-48.29	Average	VERTICAL
4	5725.00	63.67	35.59	43.37	8.04	63.93	122.2	-58.27	Peak	VERTICAL
5	5750.85	94.37	35.60	43.35	8.05	94.67	105.2	-10.53	Average	VERTICAL
6	5750.85	102.47	35.60	43.35	8.05	102.77	125.2	-22.43	Peak	VERTICAL
7	5850.00	41.32	35.64	43.29	8.12	41.79	102.2	-60.41	Average	VERTICAL
8	5850.00	51.16	35.64	43.29	8.12	51.63	122.2	-70.57	Peak	VERTICAL
9	5860.00	40.66	35.64	43.28	8.12	41.14	89.4	-48.26	Average	VERTICAL
10	5860.00	52.44	35.64	43.28	8.12	52.92	109.4	-56.48	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

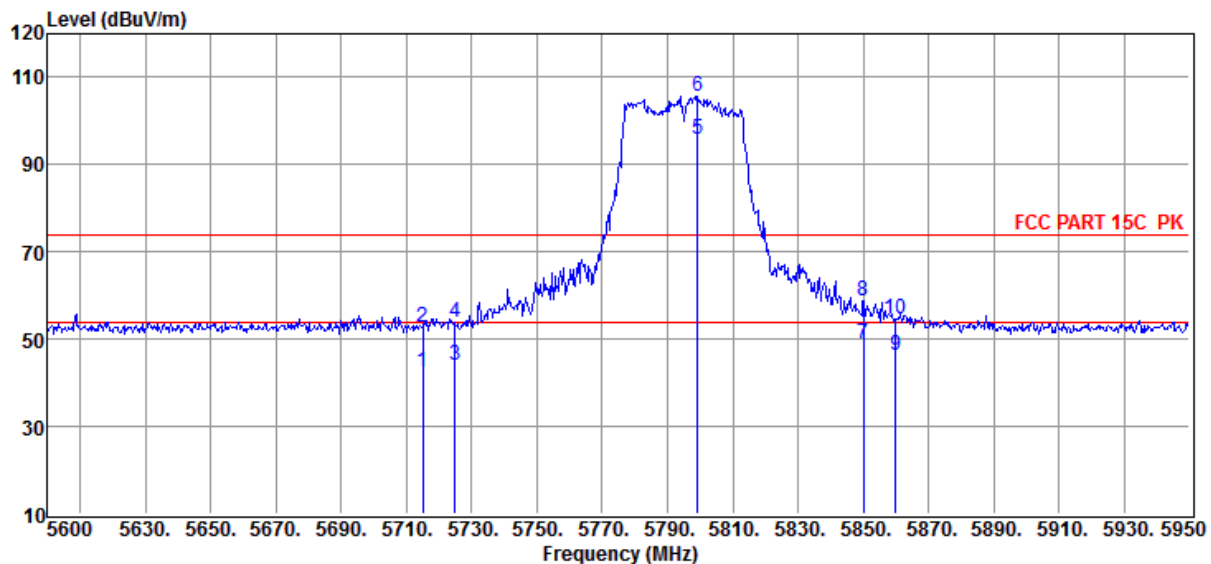
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11AC40 5795

Data: 182



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.36	35.59	43.37	8.03	42.61	89.4	-46.79	Average	HORIZONTAL
2	5715.00	52.33	35.59	43.37	8.03	52.58	109.4	-56.82	Peak	HORIZONTAL
3	5725.00	43.66	35.59	43.37	8.04	43.92	102.2	-58.28	Average	HORIZONTAL
4	5725.00	53.52	35.59	43.37	8.04	53.78	122.2	-68.42	Peak	HORIZONTAL
5	5799.15	95.48	35.62	43.32	8.08	95.86	105.2	-9.34	Average	HORIZONTAL
6	5799.15	105.38	35.62	43.32	8.08	105.76	125.2	-19.44	Peak	HORIZONTAL
7	5850.00	48.36	35.64	43.29	8.12	48.83	102.2	-53.37	Average	HORIZONTAL
8	5850.00	58.43	35.64	43.29	8.12	58.90	122.2	-63.30	Peak	HORIZONTAL
9	5860.00	45.66	35.64	43.28	8.12	46.14	89.4	-43.26	Average	HORIZONTAL
10	5860.00	54.07	35.64	43.28	8.12	54.55	109.4	-54.85	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

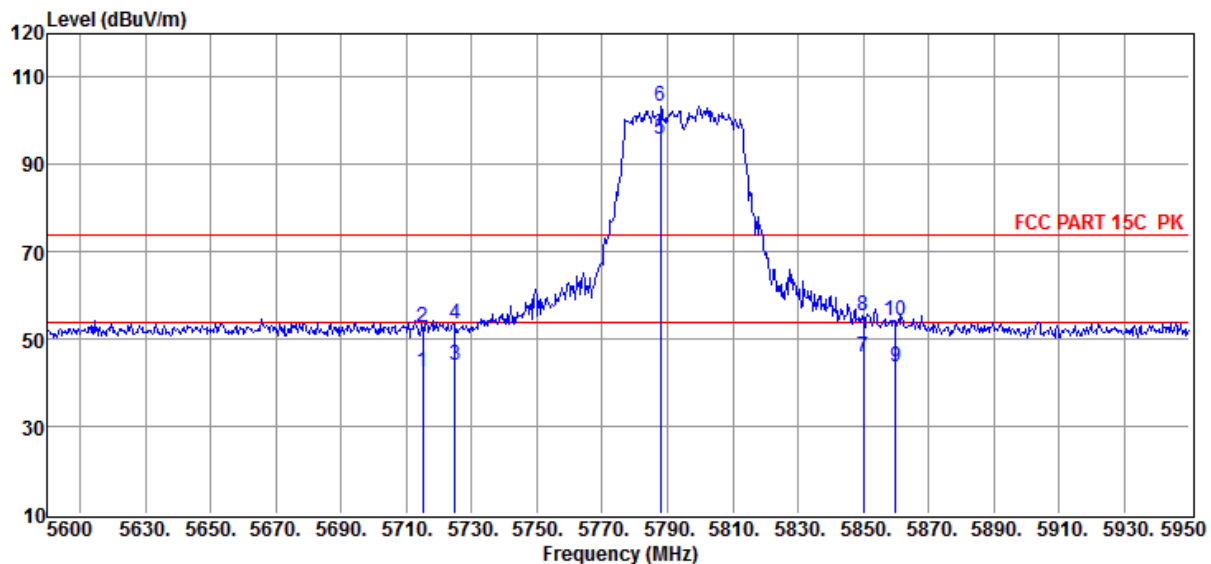
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC40 5795

Data: 181



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	42.36	35.59	43.37	8.03	42.61	89.4	-46.79	Average	VERTICAL
2	5715.00	52.30	35.59	43.37	8.03	52.55	109.4	-56.85	Peak	VERTICAL
3	5725.00	43.76	35.59	43.37	8.04	44.02	102.2	-58.18	Average	VERTICAL
4	5725.00	53.26	35.59	43.37	8.04	53.52	122.2	-68.68	Peak	VERTICAL
5	5787.95	95.36	35.62	43.33	8.08	95.73	105.2	-9.47	Average	VERTICAL
6	5787.95	103.06	35.62	43.33	8.08	103.43	125.2	-21.77	Peak	VERTICAL
7	5850.00	45.32	35.64	43.29	8.12	45.79	102.2	-56.41	Average	VERTICAL
8	5850.00	55.04	35.64	43.29	8.12	55.51	122.2	-66.69	Peak	VERTICAL
9	5860.00	43.32	35.64	43.28	8.12	43.80	89.4	-45.60	Average	VERTICAL
10	5860.00	53.80	35.64	43.28	8.12	54.28	109.4	-55.12	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

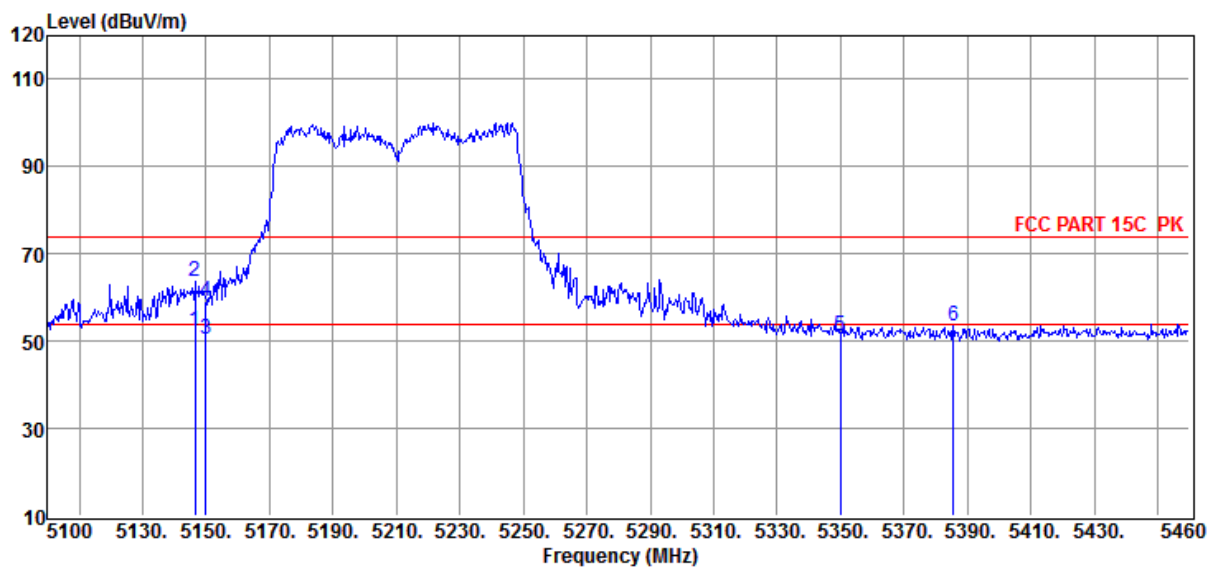
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11AC80 5210

Data: 183



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5146.44	53.33	35.15	43.71	7.67	52.44	54.00	-1.56	Average	HORIZONTAL
2	5146.44	64.75	35.15	43.71	7.67	63.86	74.00	-10.14	Peak	HORIZONTAL
3	5150.00	51.33	35.15	43.71	7.67	50.44	54.00	-3.56	Average	HORIZONTAL
4	5150.00	60.22	35.15	43.71	7.67	59.33	74.00	-14.67	Peak	HORIZONTAL
5	5350.00	51.67	35.35	43.59	7.80	51.23	74.00	-22.77	Peak	HORIZONTAL
6	5385.48	53.97	35.39	43.57	7.82	53.61	74.00	-20.39	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

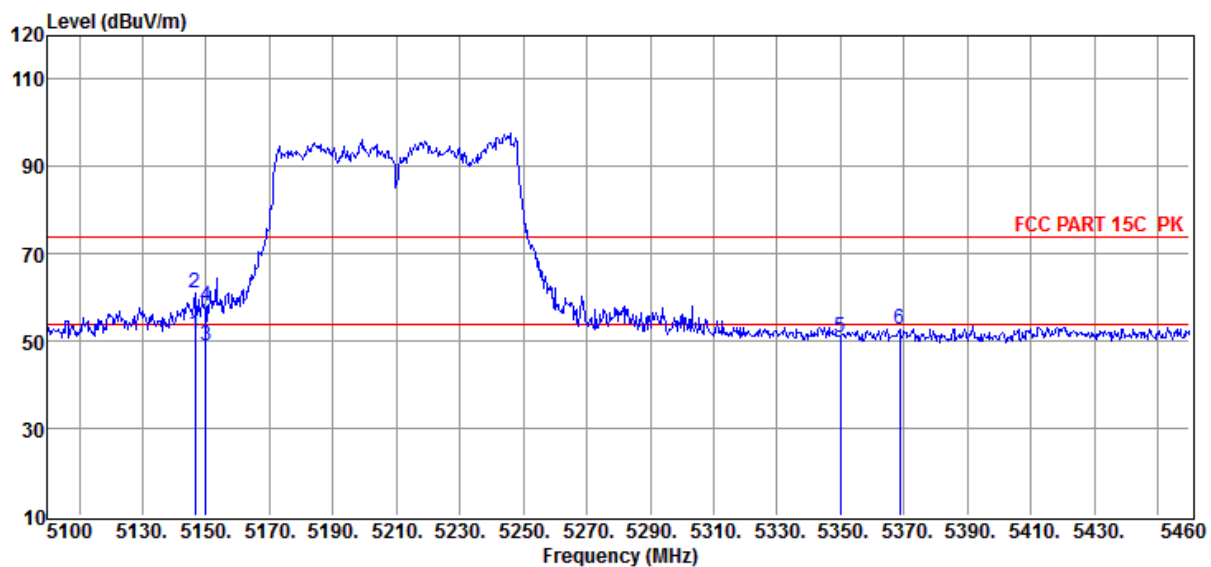
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC80 5210

Data: 184



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5146.44	52.36	35.15	43.71	7.67	51.47	54.00	-2.53	Average	VERTICAL
2	5146.44	62.07	35.15	43.71	7.67	61.18	74.00	-12.82	Peak	VERTICAL
3	5150.00	49.69	35.15	43.71	7.67	48.80	54.00	-5.20	Average	VERTICAL
4	5150.00	58.79	35.15	43.71	7.67	57.90	74.00	-16.10	Peak	VERTICAL
5	5350.00	51.42	35.35	43.59	7.80	50.98	74.00	-23.02	Peak	VERTICAL
6	5368.56	53.26	35.37	43.58	7.81	52.86	74.00	-21.14	Peak	VERTICAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

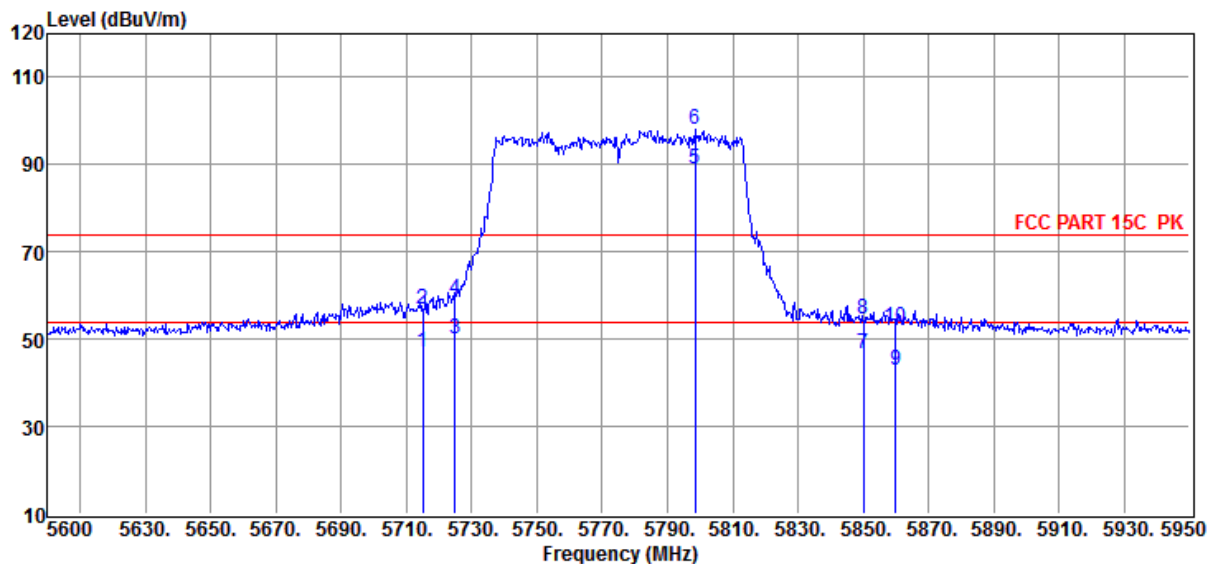
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/HORIZONTAL

Memo : 11AC80 5775

Data: 186



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	46.98	35.59	43.37	8.03	47.23	89.4	-42.17	Average	HORIZONTAL
2	5715.00	56.61	35.59	43.37	8.03	56.86	109.4	-52.54	Peak	HORIZONTAL
3	5725.00	49.99	35.59	43.37	8.04	50.25	102.2	-51.95	Average	HORIZONTAL
4	5725.00	58.93	35.59	43.37	8.04	59.19	122.2	-63.01	Peak	HORIZONTAL
5	5798.45	88.67	35.62	43.32	8.08	89.05	105.2	-16.15	Average	HORIZONTAL
6	5798.45	97.72	35.62	43.32	8.08	98.10	125.2	-27.10	Peak	HORIZONTAL
7	5850.00	46.22	35.64	43.29	8.12	46.69	102.2	-55.51	Average	HORIZONTAL
8	5850.00	54.17	35.64	43.29	8.12	54.64	122.2	-67.56	Peak	HORIZONTAL
9	5860.00	42.33	35.64	43.28	8.12	42.81	89.4	-46.59	Average	HORIZONTAL
10	5860.00	52.34	35.64	43.28	8.12	52.82	109.4	-56.58	Peak	HORIZONTAL

Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

TR-4-E-009 Radiated Emission Test Result

Test Site : DDT 3m Chamber 1#

D:\2018 RE1# Report Data\Q18080906-1E WL8200-IT3\FCC ABOVE1G.EM6

Test Date : 2018-08-28

Tested By : Talent

EUT : Outdoor Access Point

Model Number : WL8200-IT3

Power Supply : DC 48V

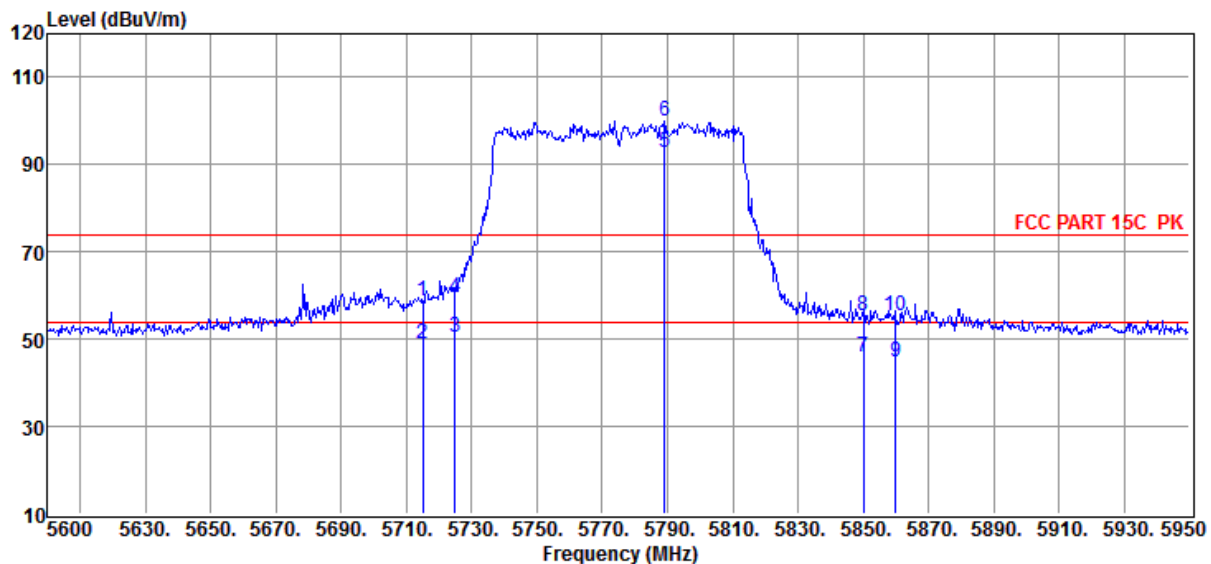
Test Mode : Tx mode

Condition : Temp:24.5°C, Humi:55.5%,
Press:100.1kPa

Antenna/Distance : 2017 HF907/3m/VERTICAL

Memo : 11AC80 5775

Data: 185



Item (Mark)	Freq. (MHz)	Read Level (dBμV)	Antenna Factor (dB/m)	PRM Factor dB	Cable Loss dB	Result Level (dBμV/m)	Limit Line (dBμV/m)	Over Limit (dB)	Detector	Polarization
1	5715.00	58.57	35.59	43.37	8.03	58.82	89.4	-30.58	Peak	VERTICAL
2	5715.00	48.65	35.59	43.37	8.03	48.90	109.4	-60.50	QP	VERTICAL
3	5725.00	50.37	35.59	43.37	8.04	50.63	102.2	-51.57	Average	VERTICAL
4	5725.00	59.21	35.59	43.37	8.04	59.47	122.2	-62.73	Peak	VERTICAL
5	5789.00	92.35	35.62	43.33	8.08	92.72	105.2	-12.48	Average	VERTICAL
6	5789.00	99.66	35.62	43.33	8.08	100.03	125.2	-25.17	Peak	VERTICAL
7	5850.00	45.36	35.64	43.29	8.12	45.83	102.2	-56.37	Average	VERTICAL
8	5850.00	55.06	35.64	43.29	8.12	55.53	122.2	-66.67	Peak	VERTICAL
9	5860.00	44.37	35.64	43.28	8.12	44.85	89.4	-44.55	Average	VERTICAL
10	5860.00	54.87	35.64	43.28	8.12	55.35	109.4	-54.05	Peak	VERTICAL

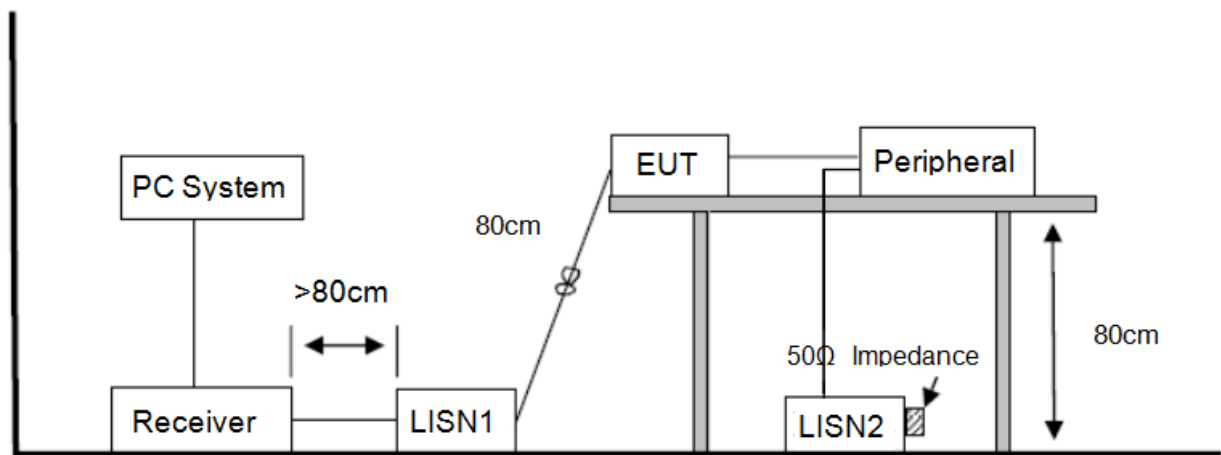
Note: 1. Result Level = Read Level + Antenna Factor + Cable loss - PRM Factor.

2. If Peak Result complies with AV limit, AV Result is deemed to comply with AV limit.

3. Test setup: RBW: 1 MHz, VBW: 3 MHz, Sweep time: auto.

10. Power Line Conducted Emission

10.1. Block diagram of test setup



10.2. Power Line Conducted Emission Limits(Class B)

Frequency	Quasi-Peak Level dB(μ V)	Average Level dB(μ V)
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*
500kHz ~ 5MHz	56	46
5MHz ~ 30MHz	60	50

Note 1: * Decreasing linearly with logarithm of frequency.

Note 2: The lower limit shall apply at the transition frequencies.

10.3. Test Procedure

The EUT and Support equipment, if needed, were put placed on a non-metallic table, 80cm above the ground plane.

Configuration EUT to simulate typical usage as described in clause 2.3 and test equipment as described in clause 10.2 of this report.

All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.

All support equipment power received from a second LISN.

Emissions were measured on each current carrying line of the EUT using an EMI Test Receiver connected to the LISN powering the EUT.

The Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.

During the above scans, the emissions were maximized by cable manipulation.

The test mode(s) described in clause 2.3 were scanned during the preliminary test.

After the preliminary scan, we found the test mode producing the highest emission level.

The EUT configuration and worse cable configuration of the above highest emission levels were recorded for reference of the final test.

EUT and support equipment were set up on the test bench as per the configuration with highest emission level in the preliminary test.

A scan was taken on both power lines, Neutral and Line, recording at least the six highest emissions.

Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit.

The test data of the worst-case condition(s) was recorded.

The bandwidth of test receiver is set at 9 kHz.

10.4. Test Result

Not Applicable, since the EUT is not AC power supply device.

11. Antenna Requirements

11.1. Limit

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.407 (a), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

11.2. Result

The antennas used for this product are integrated antenna and other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 8dBi.

END OF REPORT