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Report No.: SZEM150700437303
Page: 1 of 193

FCC REPORT

Application No:	SZEM1507004373CR
Applicant:	Polk Audio
Manufacturer:	Polk Audio
Factory:	Zhao Yang Electronic (ShenZhen) Co., Ltd.
Product Name:	wireless all-in-one speaker system
Model No.(EUT):	OMNI S6
Trade Mark:	POLK
FCC ID:	WLQOMNIS6L
Standards:	47 CFR Part 15, Subpart E (2014)
Date of Receipt:	2015-07-25
Date of Test:	2015-08-18 to 2015-08-24
Date of Issue:	2015-09-02
Test Result:	PASS *

* In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Jack Zhang
EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

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2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
00		2015-09-02		Original

Authorized for issue by:			
		Owen Zhou	2015-08-24
Tested By		(Owen Zhou) /Project Engineer	Date
		Joyce Shi	2015-09-02
Prepared By		(Joyce Shi) /Clerk	Date
		Eric Fu	2015-09-02
Checked By		(Eric Fu) /Reviewer	Date



3 Test Summary

Test Item	Test Requirement	Test method	Result
Antenna Requirement	47 CFR Part 15 Section 15.203	ANSI C63.10: 2013	PASS
AC Power Line Conducted Emission	47 CFR Part 15 Section 15.407(b)	ANSI C63.10: 2013	PASS
Conducted Output Power	47 CFR Part 15 Section 15.407(a)	ANSI C63.10: 2013	PASS
6dB Occupied Bandwidth	47 CFR Part 15 Section 15.407(e)	ANSI C63.10: 2013	PASS
26 dB Emission Bandwidth & 99% Occupied Bandwidth	47 CFR Part 15 Section 15.407(a)	ANSI C63.10: 2013	PASS
Power Spectral Density	47 CFR Part 15 Section 15.407(a)	ANSI C63.10: 2013	PASS
Radiated Spurious Emissions	47 CFR Part 15 Section 15.407(b)	ANSI C63.10: 2013	PASS
Restricted bands around fundamental frequency (Radiated Emission)	47 CFR Part 15 Section 15.407(b)	ANSI C63.10: 2013	PASS
Frequency Stability	47 CFR Part 15 Section 15.407(g)	ANSI C63.10: 2013	PASS

4 Contents

	Page
.....	1
2 VERSION	2
3 TEST SUMMARY	3
4 CONTENTS	4
5 GENERAL INFORMATION	5
5.1 CLIENT INFORMATION.....	5
5.2 GENERAL DESCRIPTION OF EUT.....	5
5.3 TEST ENVIRONMENT AND MODE.....	8
5.4 DESCRIPTION OF SUPPORT UNITS.....	8
5.5 TEST LOCATION.....	8
5.6 TEST FACILITY.....	9
5.7 DEVIATION FROM STANDARDS	9
5.8 ABNORMALITIES FROM STANDARD CONDITIONS	9
5.9 OTHER INFORMATION REQUESTED BY THE CUSTOMER	9
5.10 EQUIPMENT LIST	10
6 TEST RESULTS AND MEASUREMENT DATA	13
6.1 ANTENNA REQUIREMENT	13
6.2 CONDUCTED EMISSIONS	14
6.3 CONDUCTED OUTPUT POWER.....	18
6.4 26dB EMISSION BANDWIDTH AND 99% OCCUPIED BANDWIDTH.....	54
6.5 6dB EMISSION BANDWIDTH.....	91
6.6 POWER SPECTRAL DENSITY.....	97
6.7 RADIATED SPURIOUS EMISSIONS	133
6.7.1 Radiated emission below 1GHz.....	135
6.7.2 Transmitter emission above 1GHz.....	137
6.8 RESTRICTED BANDS AROUND FUNDAMENTAL FREQUENCY	154
6.9 FREQUENCY STABILITY.....	180
7 PHOTOGRAPHS - EUT TEST SETUP	192
7.1 CONDUCTED EMISSION	192
7.2 RADIATED SPURIOUS EMISSION	192
8 PHOTOGRAPHS - EUT CONSTRUCTIONAL DETAILS	193



5 General Information

5.1 Client Information

Applicant:	Polk Audio
Address of Applicant:	5601 Metro Drive Baltimore, Maryland, 21215, USA
Manufacturer:	Polk Audio
Address of Manufacturer:	5601 Metro Drive Baltimore, Maryland, 21215, USA
Factory:	Zhao Yang Electronic (ShenZhen) Co., Ltd.
Address of Factory:	Section A, 4th Floor, Building 1 & Building 2, De Yong Jia Industrial Park, Guang Qiao Road, Yu Lv Community, Gong Ming Street, Guang Ming New District, Shenzhen, Guangdong, P.R.C

5.2 General Description of EUT

Product Name:	wireless all-in-one speaker system			
Model No.:	OMNI S6			
Trade Mark:	POLK			
Operation Frequency:	Band	Mode	Frequency Range(MHz)	Number of channels
UNII Band I	IEEE 802.11a	5180-5240	4	
	IEEE 802.11n 20MHz	5180-5240	4	
	IEEE 802.11n 40MHz	5190-5230	2	
UNII Band II-A	IEEE 802.11a	5260-5320	4	
	IEEE 802.11n 20MHz	5260-5320	4	
	IEEE 802.11n 40MHz	5270-5310	2	
UNII Band II-C	IEEE 802.11a	5500-5700	11	
	IEEE 802.11n 20MHz	5500-5700	11	
	IEEE 802.11n 40MHz	5510-5670	5	
UNII Band III	IEEE 802.11a	5745-5825	5	
	IEEE 802.11n 20MHz	5745-5825	5	
	IEEE 802.11n 40MHz	5755-5795	2	
Type of Modulation:	IEEE 802.11a: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE 802.11n: OFDM(BPSK/QPSK/16QAM/64QAM)			
Sample Type:	Fixed production			
Test Power Grade:	802.11a :13 dBm@54Mbps; 802.11n20(5G) :11 dBm@MCS7; 802.11n40(5G) :11 dBm@MCS7 (manufacturer declare)			
Test Software of EUT:	teraterm.exe (manufacturer declare)			
Antenna Type:	Integral			
Antenna Gain:	3.92dBi			
Antenna Delivery:	1TX+1RX			

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SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM150700437303
Page: 6 of 193

	Remark: The antennas can not transmit simultaneously.
Power Supply:	AC 100-240V 50/60Hz
Test Voltage:	AC 120V 60Hz

Note:

In FCC 15.31, for each band in which the device can be operated with the device operating at the number of frequencies in each band specified in the following table, and the selected channel to perform the test as below:

Frequency Range of Operation Operating Frequency Range (in each Band)	Number of Measurement Frequencies Required	Location of Measurement Frequency in Band of Operation
1 MHz or less	1	centre
1 MHz to 10 MHz	2	1 near high end, 1 near low end
Greater than 10 MHz	3	1 near high end, 1 near centre

For UNII Band I:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/n 20MHz	The Lowest channel	5180
	The Middle channel	5200
	The Highest channel	5240
IEEE 802.11n 40MHz	The Lowest channel	5190
	The Highest channel	5230

For UNII Band II-A:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/n 20MHz	The Lowest channel	5260
	The Middle channel	5300
	The Highest channel	5320
IEEE 802.11n 40MHz	The Lowest channel	5270
	The Highest channel	5310

For UNII Band II-C:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/n 20MHz	The Lowest channel	5500
	The Middle channel	5600
	The Highest channel	5700
IEEE 802.11n 40MHz	The Lowest channel	5510
	The Middle channel	5590
	The Highest channel	5670



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM150700437303
Page: 7 of 193

For UNII Band III:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/n 20MHz	The Lowest channel	5745
	The Middle channel	5785
	The Highest channel	5825
IEEE 802.11n 40MHz	The Lowest channel	5755
	The Highest channel	5795

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5.3 Test Environment and Mode

Operating Environment:	
Temperature:	24.0 °C
Humidity:	52 % RH
Atmospheric Pressure:	1005 mbar
Test mode:	
Transmitting mode	Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate.

5.4 Description of Support Units

The EUT has been tested independent unit.

5.5 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,
No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China.
518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

5.6 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **VCCI**

The 10m Semi-anechoic chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

- **FCC – Registration No.: 556682**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

- **Industry Canada (IC)**

Two 3m Semi-anechoic chambers of SGS-CSTC Standards Technical Services Co., Ltd. have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-2.

5.7 Deviation from Standards

None.

5.8 Abnormalities from Standard Conditions

None.

5.9 Other Information Requested by the Customer

None.



5.10 Equipment List

Conducted Emission					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	2016-05-13
2	LISN	Rohde & Schwarz	ENV216	SEL0152	2015-10-24
3	LISN	ETS-LINDGREN	3816/2	SEL0021	2016-05-13
4	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T8-02	SEL0162	2015-08-30
5	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T4-02	SEL0163	2015-08-30
6	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T2-02	SEL0164	2015-08-30
7	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	2016-05-13
8	Coaxial Cable	SGS	N/A	SEL0025	2016-05-13
9	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-24
10	Humidity/ Temperature Indicator	Shanghai Qixiang	ZJ1-2B	SEL0103	2015-10-24
11	Barometer	Chang Chun	DYM3	SEL0088	2016-05-13



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 11 of 193

RE in Chamber					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2015-06-10
2	Spectrum Analyzer	Rohde & Schwarz	FSU43	SEL0270	2015-07-28
3	EMI Test software	AUDIX	E3	SEL0050	N/A
4	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	2015-10-24
5	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0006	2015-10-24
6	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	2015-10-24
7	Horn Antenna(26GHz-40 GHz)	A.H.Systems, inc.	SAS-573	SEL0349	2016-03-20
8	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2015-05-16
9	Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEL0168	2015-10-24
10	Pre-amplifier(26GHz -40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEL0350	2016-03-20
11	Coaxial cable	SGS	N/A	SEL0027	2015-05-29
12	Coaxial cable	SGS	N/A	SEL0189	2015-05-29
13	Coaxial cable	SGS	N/A	SEL0121	2015-05-29
14	Coaxial cable	SGS	N/A	SEL0178	2015-05-29
15	Band filter	Amindeon	82346	SEL0094	2015-05-16
16	Barometer	Chang Chun	DYM3	SEL0088	2015-05-16
17	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-24
18	Humidity/ Temperature Indicator	Shanghai Qixiang	ZJ1-2B	SEL0103	2015-10-24
19	Signal Generator (10M-27GHz)	Rohde & Schwarz	SMR27	SEL0067	2015-05-16
20	Signal Generator	Rohde & Schwarz	SMY01	SEL0155	2015-10-24
21	Loop Antenna	Beijing Daze	ZN30401	SEL0203	2015-06-04

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Shenzhen Branch**

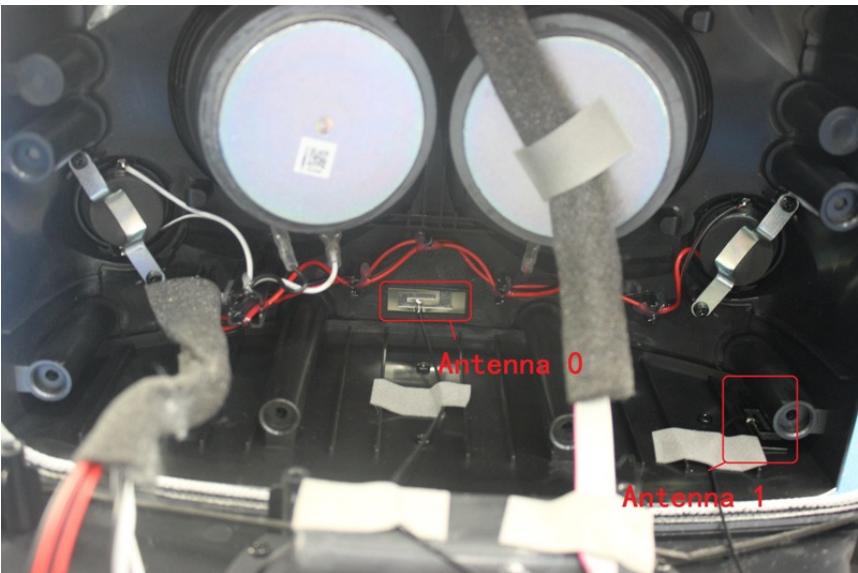
Report No.: SZEM150700437303
Page: 12 of 193

RF connected test					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Due date (yyyy-mm-dd)
1	DC Power Supply	Zhao Xin	RXN-305D	SEL0117	2015-10-24
2	Humidity/ Temperature Indicator	HYGRO	ZJ1-2B	SEL0033	2015-10-24
3	Spectrum Analyzer	Rohde & Schwarz	FSP	SEL0154	2015-10-24
4	Coaxial cable	SGS	N/A	SEL0178	2016-05-13
5	Coaxial cable	SGS	N/A	SEL0179	2016-05-13
6	Barometer	ChangChun	DYM3	SEL0088	2016-05-13
7	Signal Generator	Rohde & Schwarz	SML03	SEL0068	2016-04-25
8	Band filter	amideon	82346	SEL0094	2016-05-13
9	POWER METER	R & S	NRVS	SEL0144	2015-10-24
10	Attenuator	Beijin feihang taida	TST-2-6dB	SEL0205	2016-04-25
11	Power Divider(splitter)	Agilent Technologies	11636B	SEL0130	2015-10-24

Note: The calibration interval is one year, all the instruments are valid.

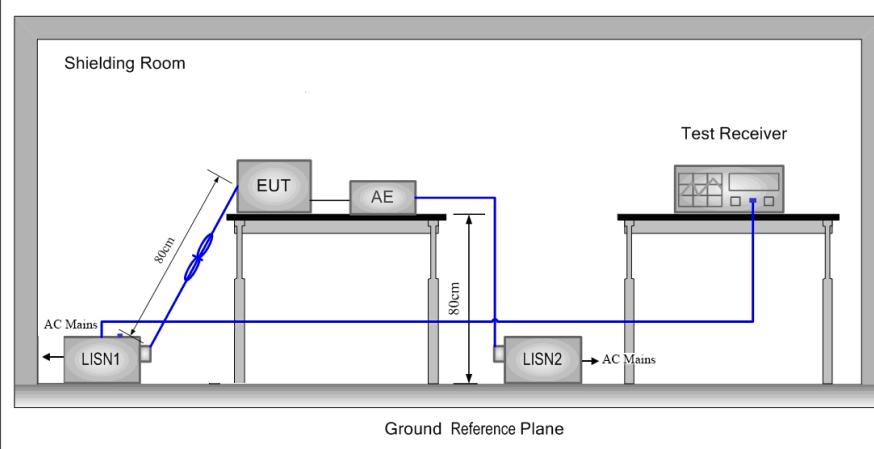
6 Test results and Measurement Data

6.1 Antenna Requirement

Test Requirement:	47 CFR Part 15 Section 15.203
EUT Antenna:	
The antenna is integrated antenna and no consideration of replacement. The best case gain of the antenna is 3.92dBi. It support operations in 1X1 diversity , 1 X1 SISO configurations and Single-stream legacy modes .	

6.2 Conducted Emissions

Test Requirement:	47 CFR Part 15 Section 15.407(b)		
Test Method:	ANSI C63.10: 2013		
Test Frequency Range:	150kHz to 30MHz		
Limit:	Frequency range (MHz)		Limit (dBuV)
			Quasi-peak Average
	0.15-0.5	66 to 56*	56 to 46*
	0.5-5	56	46
5-30		60	50
* Decreases with the logarithm of the frequency.			
Test Procedure:	<ol style="list-style-type: none">1) The mains terminal disturbance voltage test was conducted in a shielded room.2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a $50\Omega/50\mu\text{H} + 5\Omega$ linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane.4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2.5) In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement.		

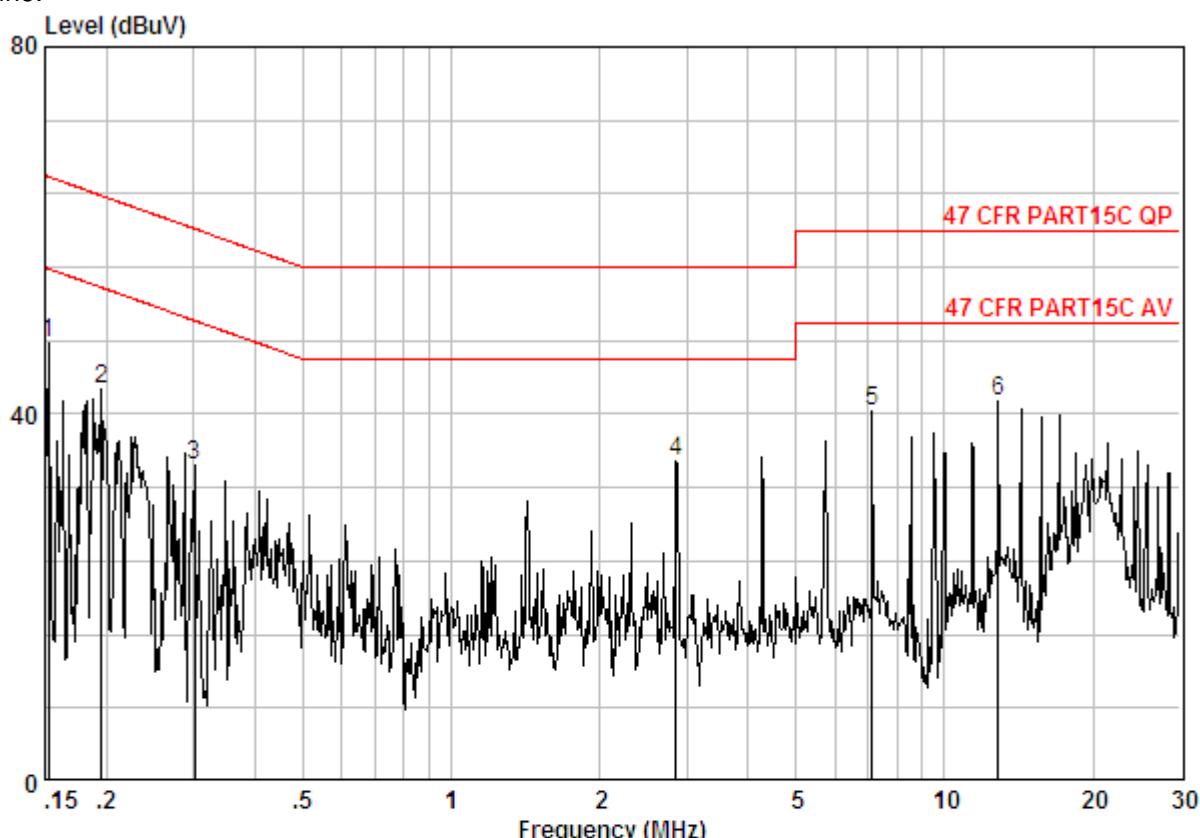
Test Setup:	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates at lowest, middle and highest channel.
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate of 802.11a at lowest channel is the worst case. Only the worst case is recorded in the report. Pre-scan was performed at Antenna 0 and Antenna 1, no worst case was found. Only the test data of Antenna 0 was shown in this report.
Instruments Used:	Refer to section 5.10 for details.
Test Results:	Pass

Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

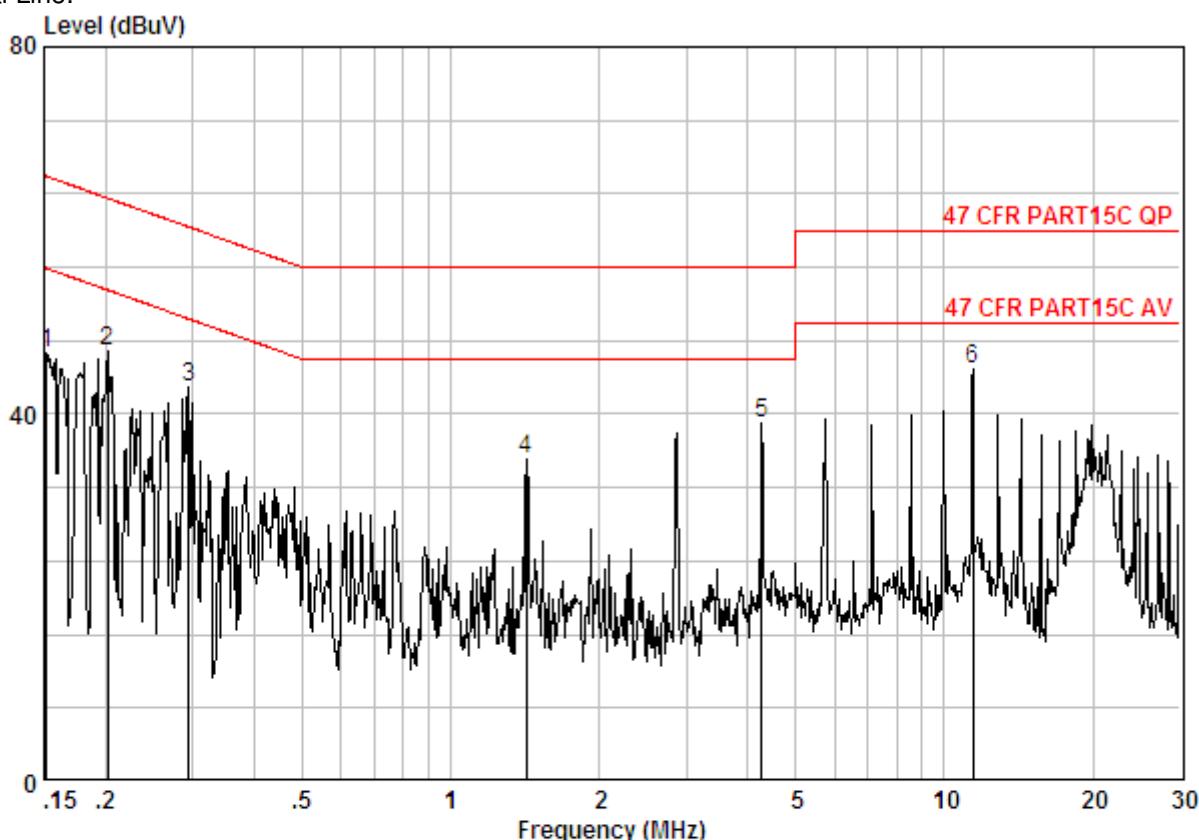
Live Line:



Site : Shielding Room
Condition : 47 CFR PART15C AV CE LINE
Job No. : 4373CR
Test Mode : TX

Freq	Cable	LISN	Read	Limit		Over	Remark
	MHz	Loss	Factor	Level	Level	Line	
1	0.15240	0.02	9.82	37.94	47.78	55.87	-8.09 Peak
2	0.19550	0.02	9.83	32.80	42.64	53.80	-11.15 Peak
3	0.30188	0.01	9.84	24.66	34.51	50.19	-15.68 Peak
4	2.854	0.02	10.02	24.81	34.84	46.00	-11.16 Peak
5	7.137	0.01	10.15	30.17	40.33	50.00	-9.67 Peak
6	12.852	0.01	10.16	31.26	41.43	50.00	-8.57 Peak

Neutral Line:



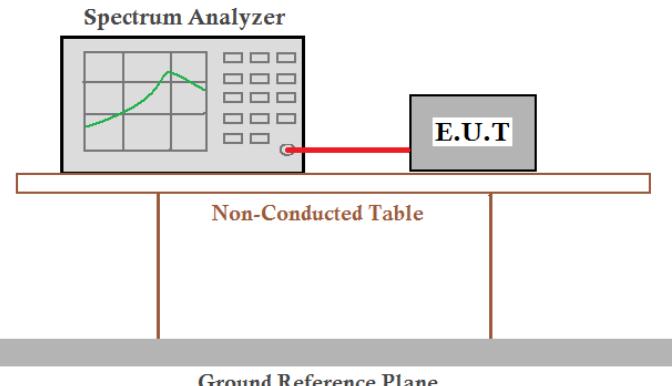
Site : Shielding Room
Condition : 47 CFR PART15C AV CE NEUTRAL
Job No. : 4373CR
Test Mode : TX

	Freq	Cable	LISN	Read	Limit		Over	Remark
		MHz	Loss	Factor	Level	Level	Line	
1	0.15160	0.02	9.78	36.81	46.61	55.91	-9.30	Peak
2	0.20181	0.02	9.85	37.06	46.93	53.54	-6.61	Peak
3	0.29398	0.01	9.86	33.10	42.98	50.41	-7.44	Peak
4	1.426	0.02	10.07	24.99	35.09	46.00	-10.91	Peak
5	4.269	0.01	10.13	28.96	39.11	46.00	-6.89	Peak
6 @	11.438	0.01	10.16	34.82	44.99	50.00	-5.01	Peak

Notes:

1. The following Quasi-Peak and Average measurements were performed on the EUT:
2. Final Test Level = Receiver Reading + LISN Factor + Cable Loss.

6.3 Conducted Output Power

Test Requirement:	47 CFR Part 15 Section 15.407(a)	
Test Method:	ANSI C63.10: 2013	
Test Setup:		
<i>Remark:</i> <i>Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.</i>		
Test Instruments:	Refer to section 5.10 for details.	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.	
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40). Only the worst case is recorded in the report.	
Limit:	Frequency Band	Limit
	5150-5250MHz	Not exceed 250mW(24dBm)
	5250-5350MHz	The lesser of 250mW(24dBm) or $11 + 10\log B$
	5470-5725MHz	The lesser of 250mW(24dBm) or $11 + 10\log B$
	5725-5850MHz	Not exceed 1W(30dBm)
	*Where B is the 26dB emission bandwidth in MHz	
Test Results:	Pass	

Measurement Data:

802.11a mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5180	11.33	11.09	24.00	Pass
5200	11.52	11.46	24.00	Pass
5240	11.85	11.73	24.00	Pass
5260	11.96	11.47	23.99	Pass
5300	12.44	11.31	24.00	Pass
5320	12.34	10.70	24.00	Pass
5500	11.51	10.99	24.00	Pass
5600	11.79	11.23	24.00	Pass
5700	12.52	9.10	24.00	Pass
5745	11.64	10.40	30.00	Pass
5785	10.71	8.83	30.00	Pass
5825	9.86	8.15	30.00	Pass

802.11n(HT20) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5180	9.89	8.87	24.00	Pass
5200	9.94	9.33	24.00	Pass
5240	10.23	9.78	24.00	Pass
5260	10.90	9.27	24.00	Pass
5300	11.60	8.60	24.00	Pass
5320	11.58	8.16	24.00	Pass
5500	10.00	10.12	24.00	Pass
5600	9.81	10.25	24.00	Pass
5700	11.09	8.17	24.00	Pass
5745	10.23	9.44	30.00	Pass
5785	9.83	8.41	30.00	Pass
5825	9.20	7.24	30.00	Pass



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**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 20 of 193

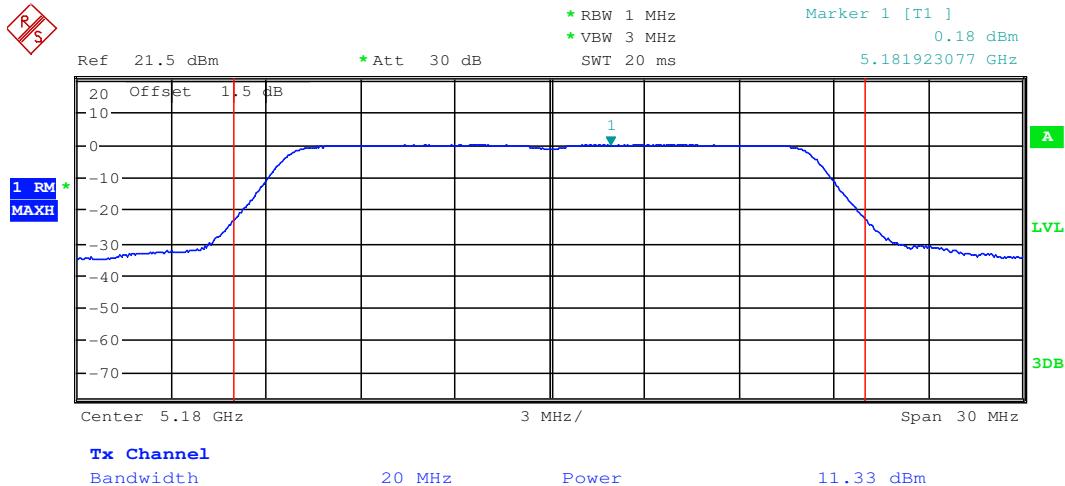
802.11n(HT40) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5190	10.04	9.07	24.00	Pass
5230	10.13	9.44	24.00	Pass
5270	11.37	8.88	24.00	Pass
5310	11.64	8.33	24.00	Pass
5510	9.86	9.88	24.00	Pass
5590	10.26	10.34	24.00	Pass
5670	11.35	8.35	24.00	Pass
5755	9.99	9.18	30.00	Pass
5795	9.41	8.10	30.00	Pass

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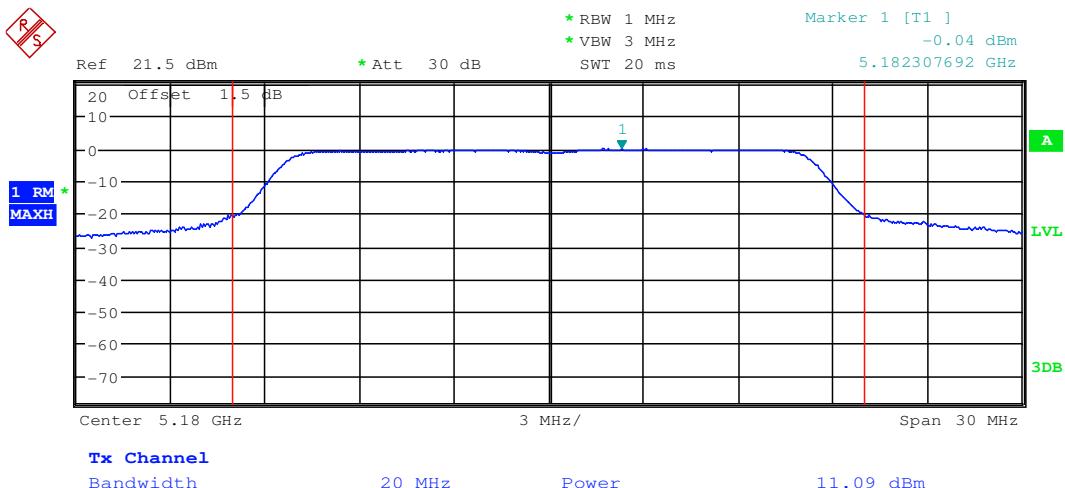
Test plot as follows:

Test mode:	802.11a	Frequency(MHz):	5180
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Antenna 0

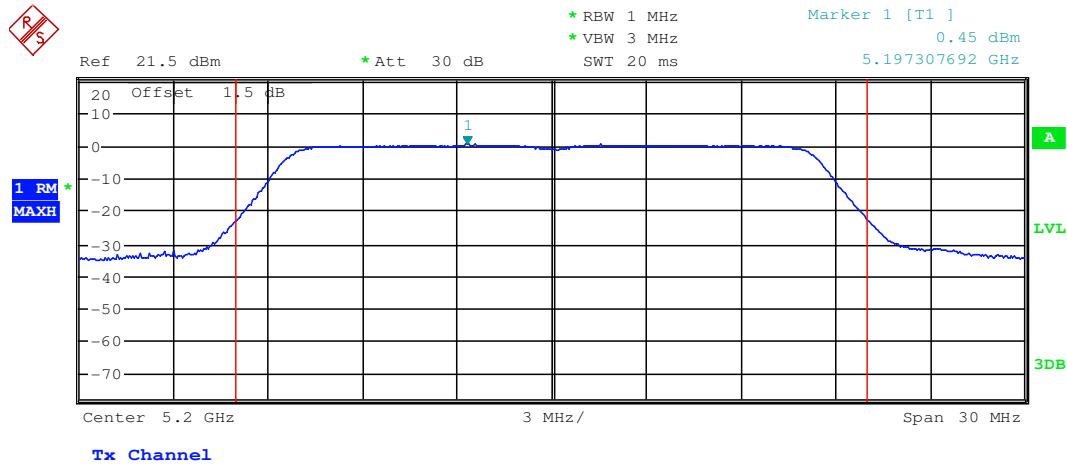


Antenna 1

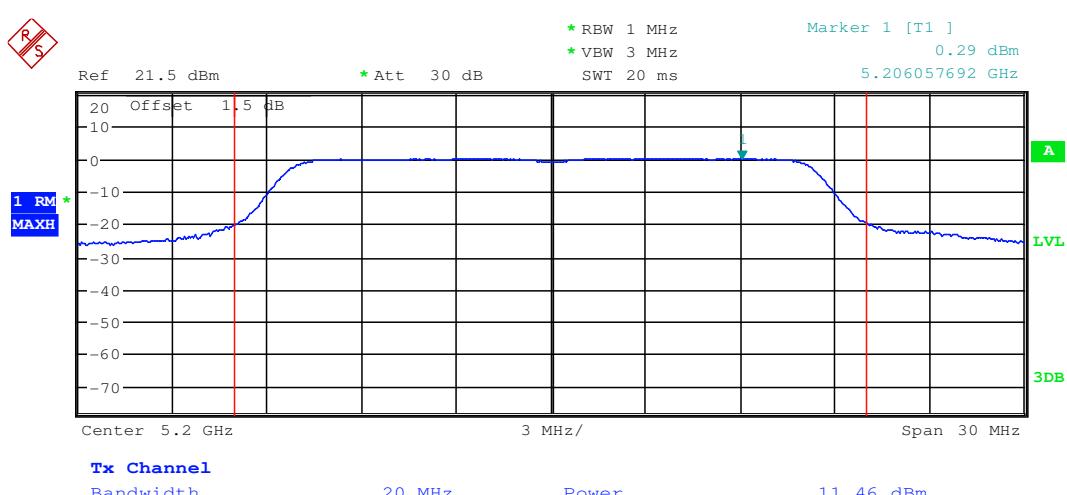


Test mode:	802.11a	Frequency(MHz):	5200
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Antenna 0

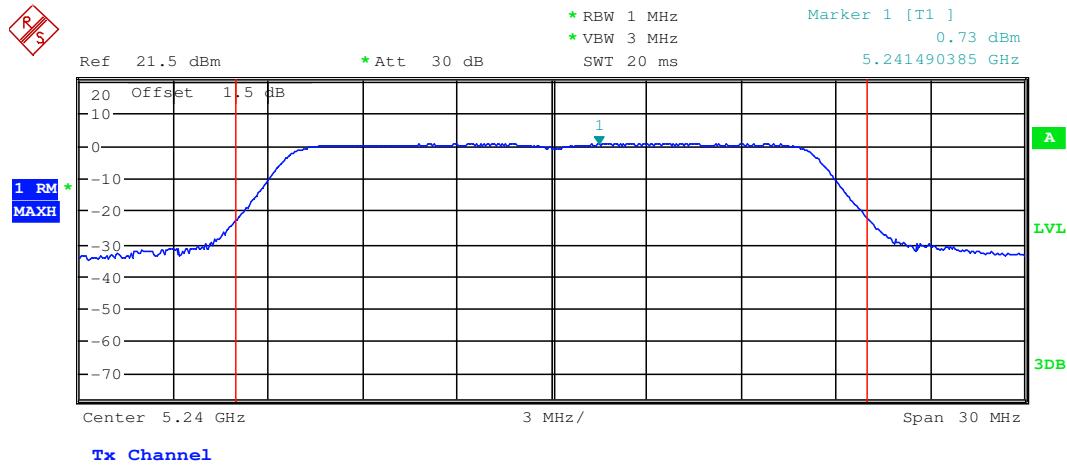


Antenna 1

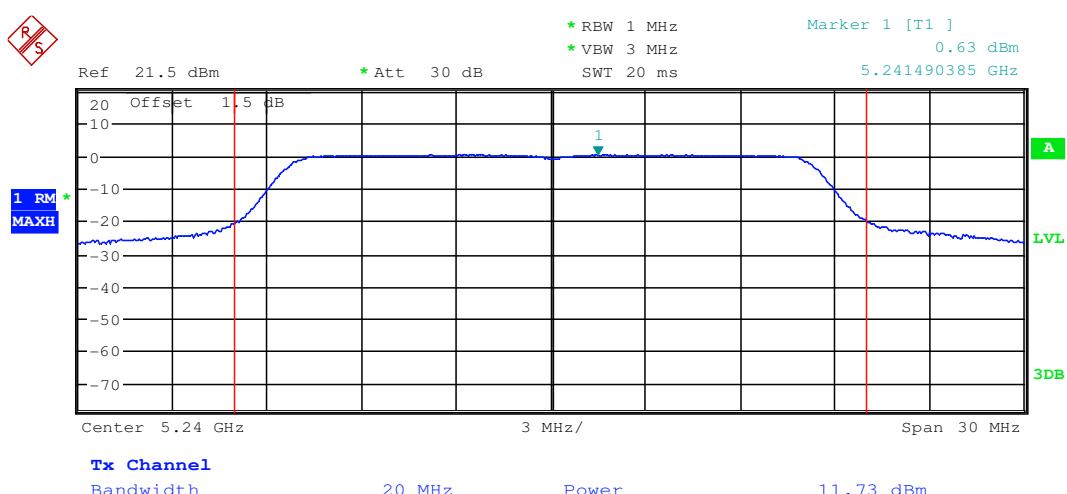


Test mode:	802.11a	Frequency(MHz):	5240
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Antenna 0

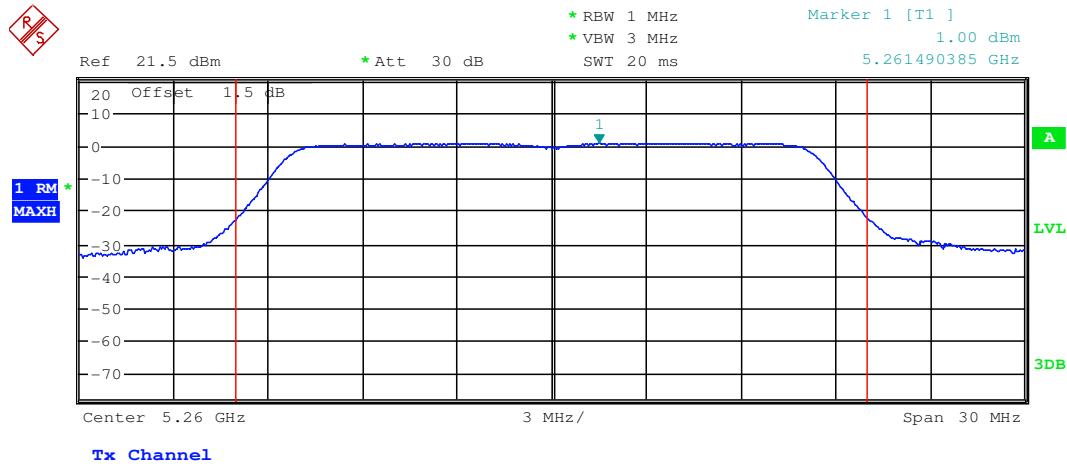


Antenna 1

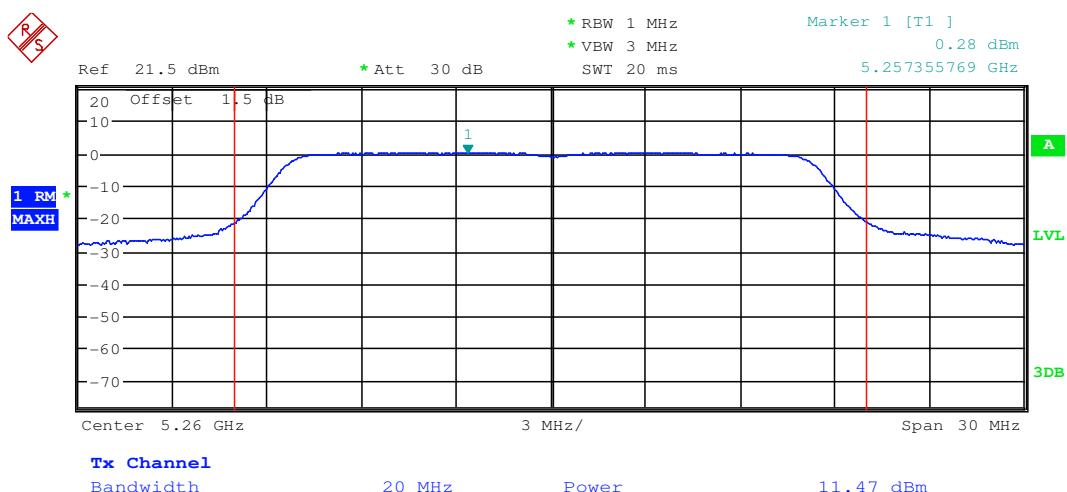


Test mode:	802.11a	Frequency(MHz):	5260
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Antenna 0

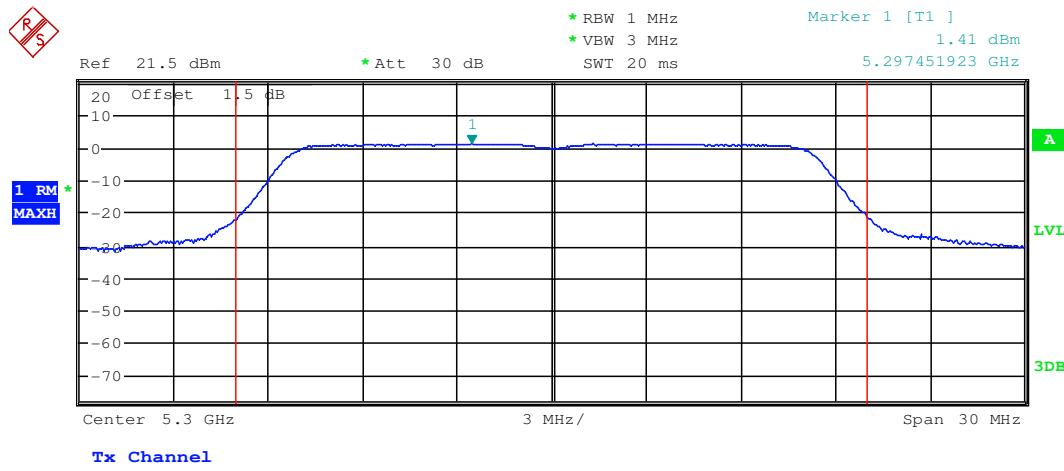


Antenna 1

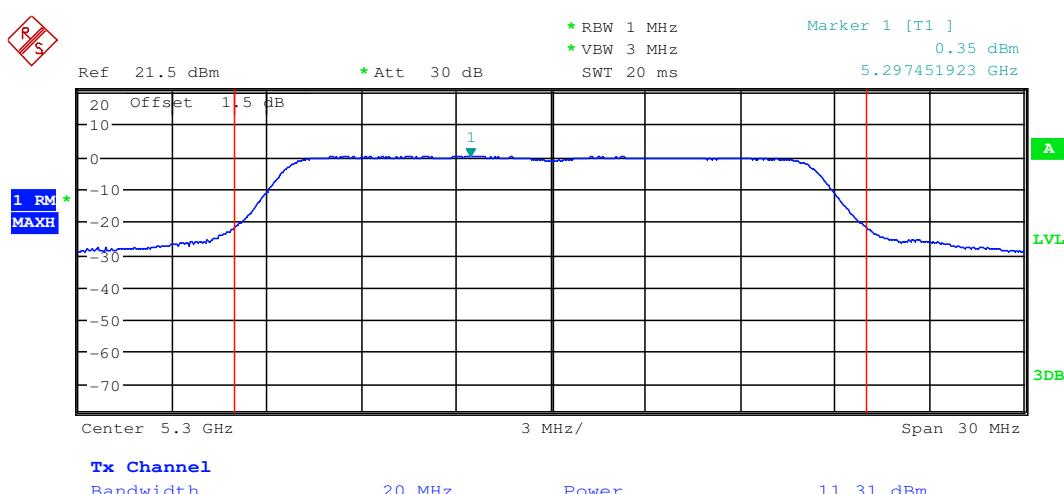


Test mode:	802.11a	Frequency(MHz):	5300
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Antenna 0

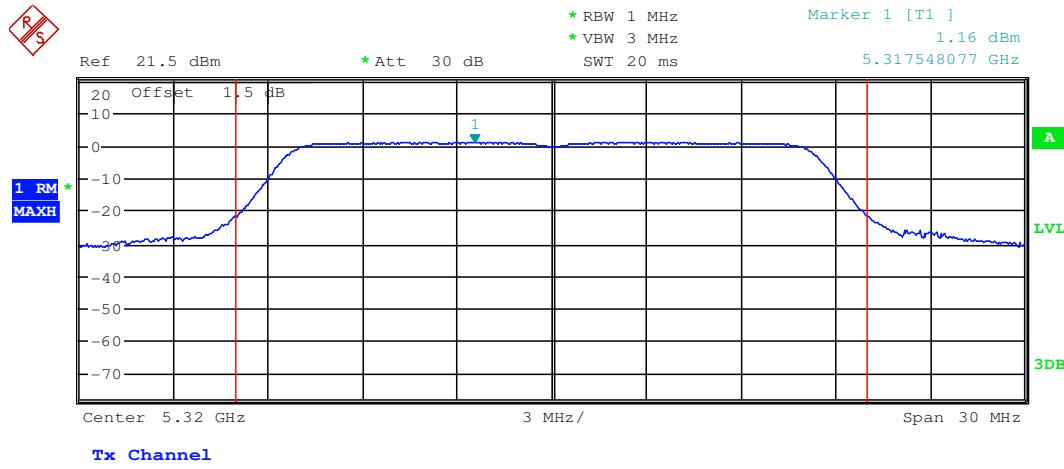


Antenna 1

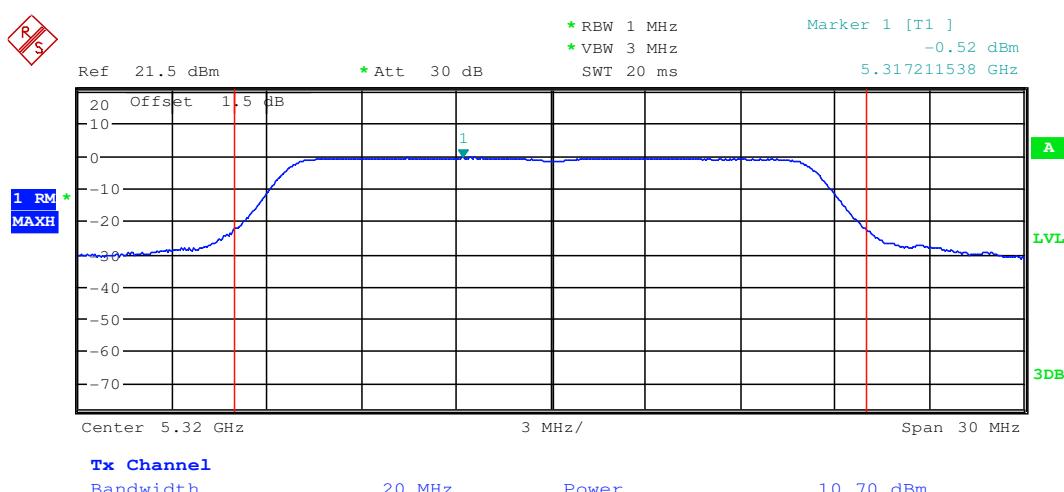


Test mode:	802.11a	Frequency(MHz):	5320
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Antenna 0

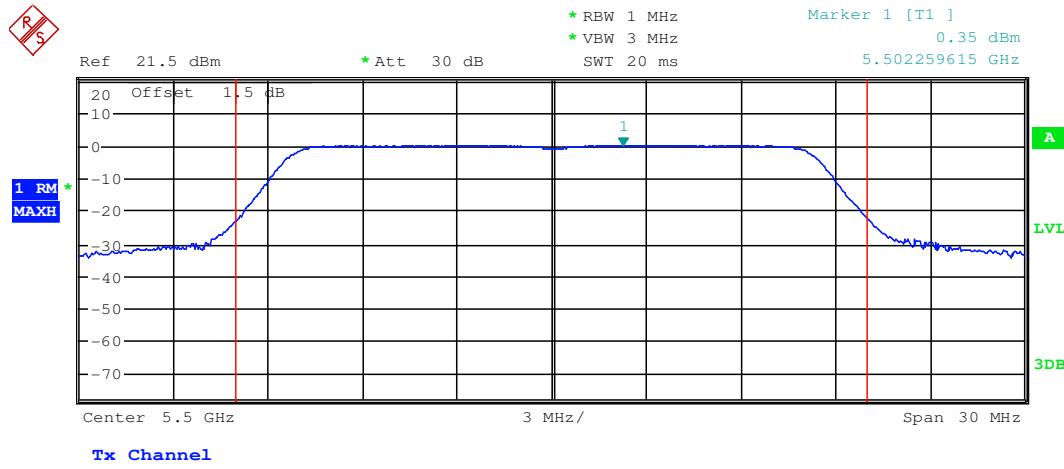


Antenna 1

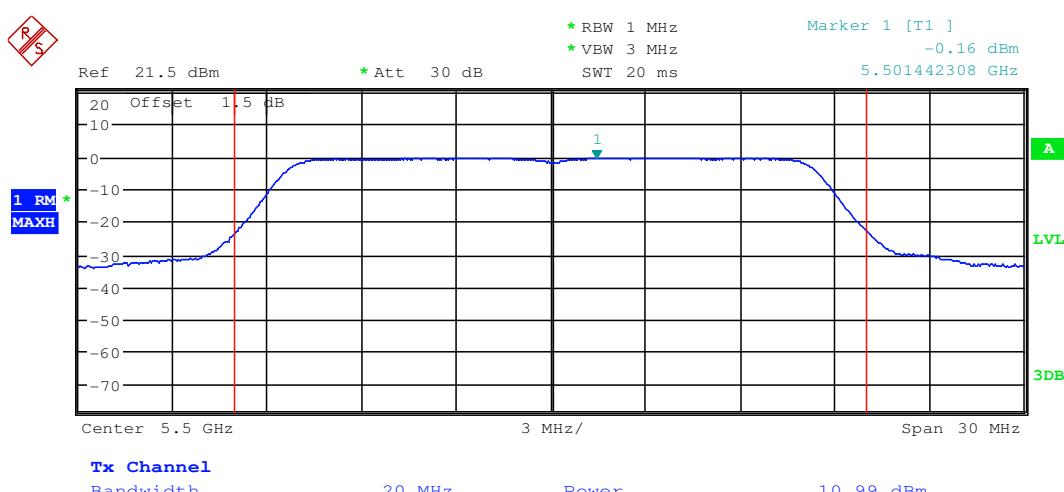


Test mode:	802.11a	Frequency(MHz):	5500
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Antenna 0

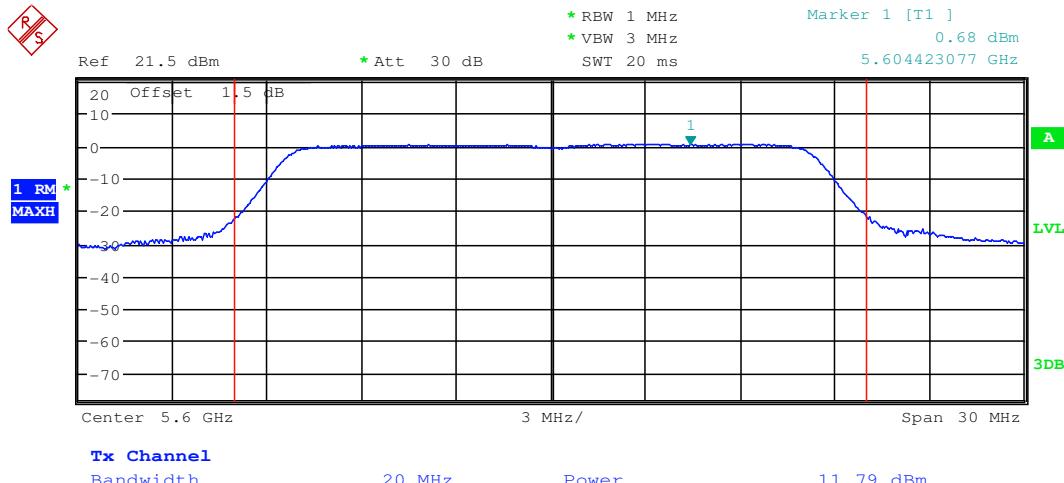


Antenna 1

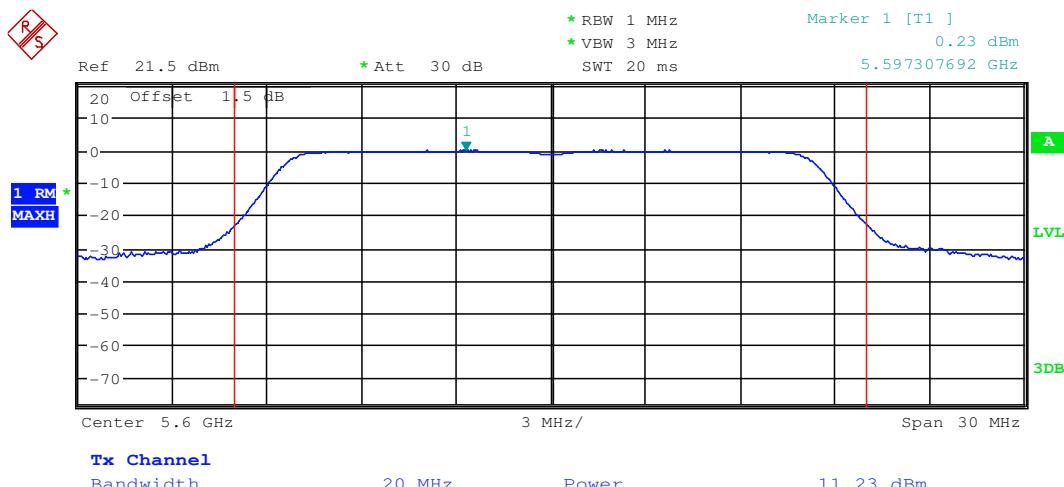


Test mode:	802.11a	Frequency(MHz):	5600
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Antenna 0

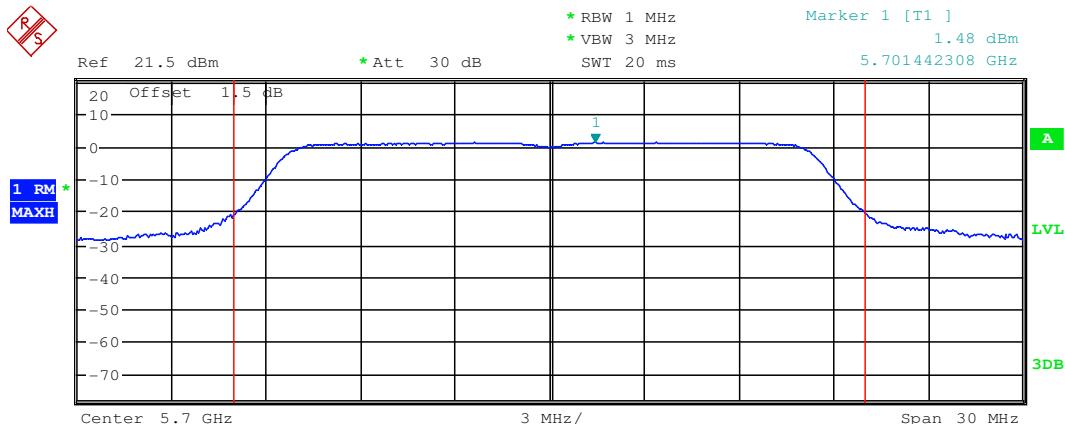


Antenna 1



Test mode:	802.11a	Frequency(MHz):	5700
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Antenna 0

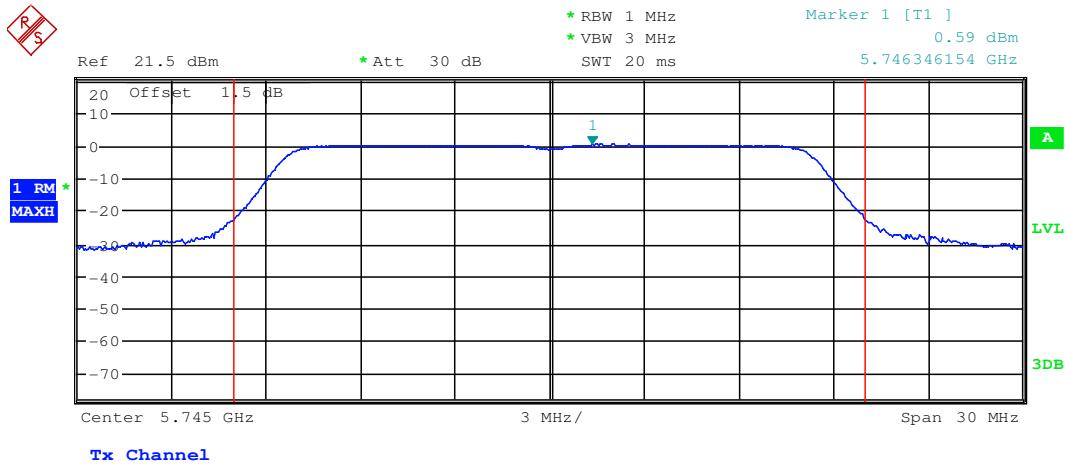


Antenna 1

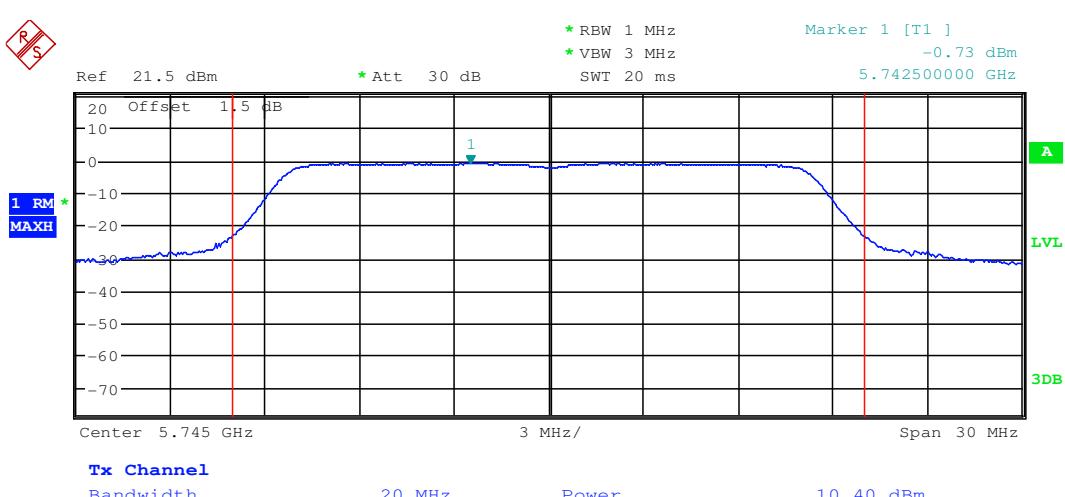


Test mode:	802.11a	Frequency(MHz):	5745
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Antenna 0

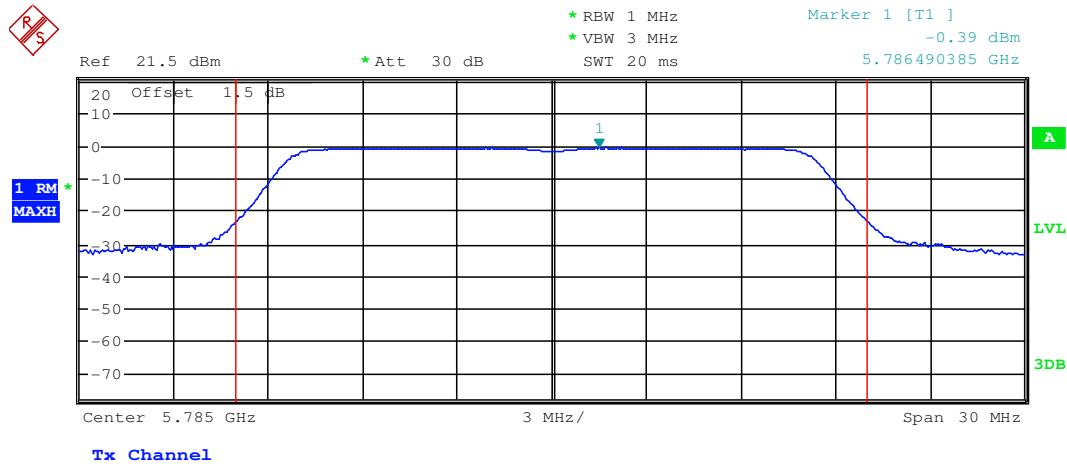


Antenna 1

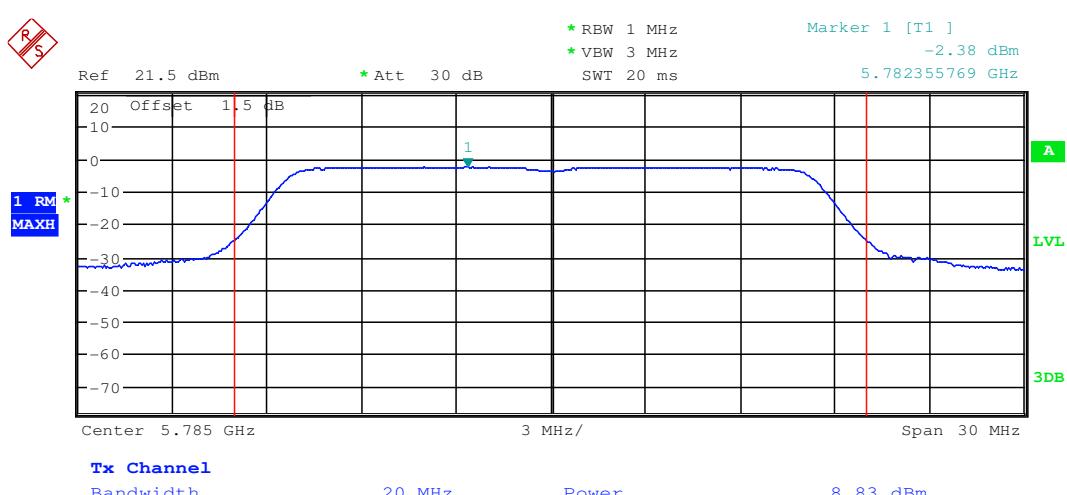


Test mode:	802.11a	Frequency(MHz):	5785
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Antenna 0

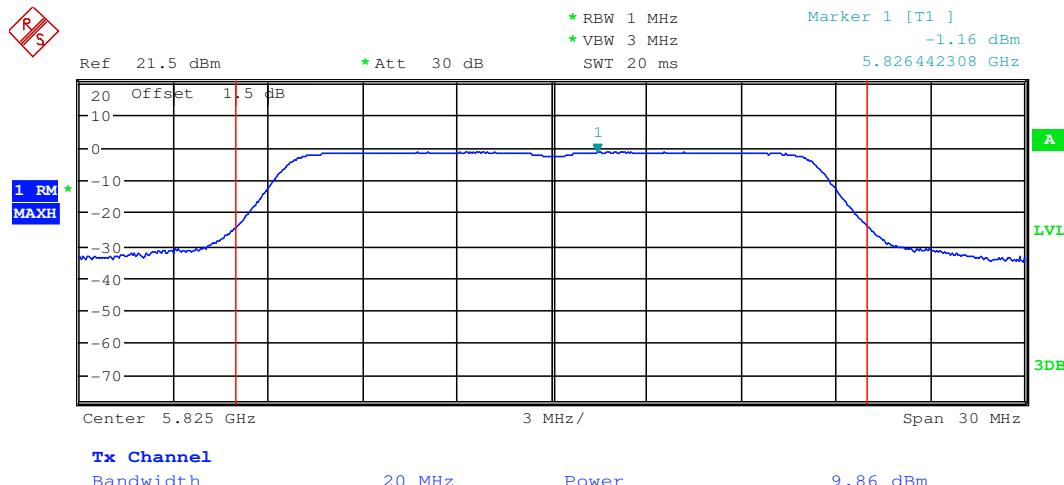


Antenna 1

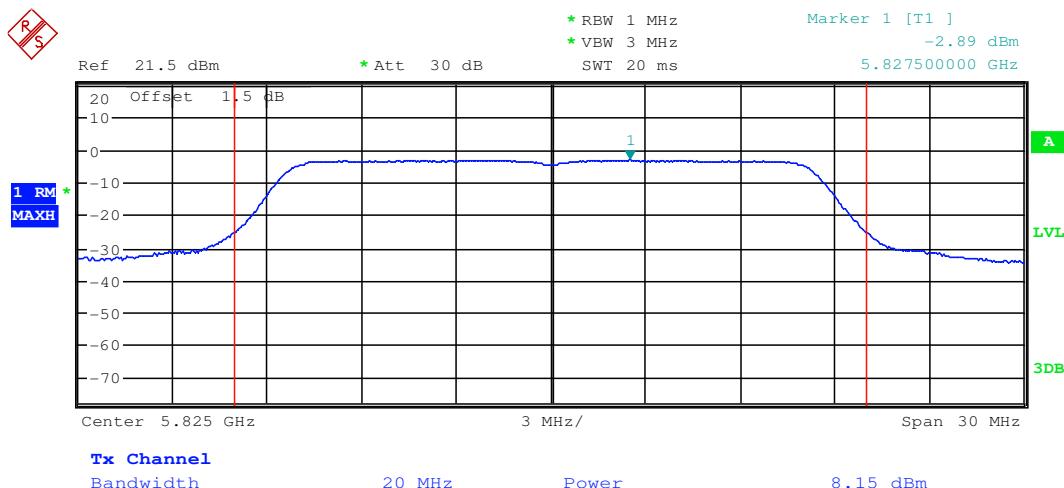


Test mode:	802.11a	Frequency(MHz):	5825
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Antenna 0

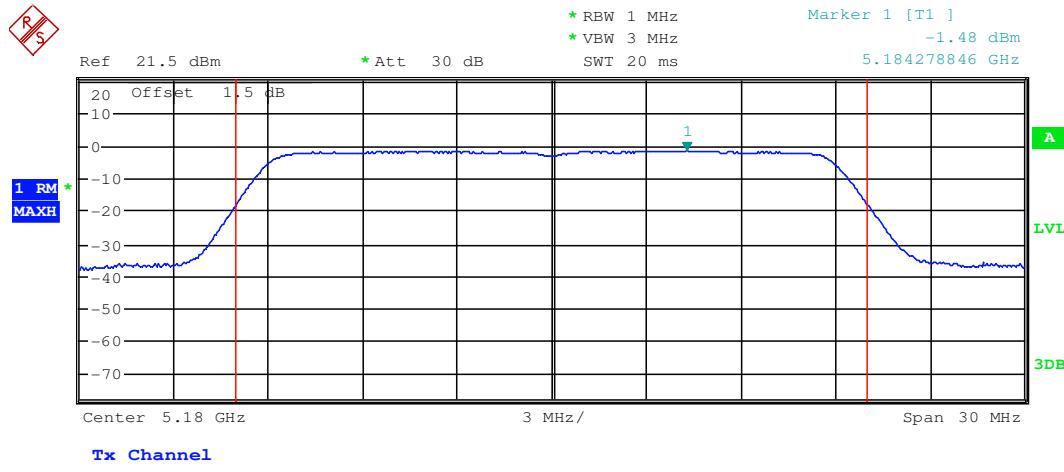


Antenna 1

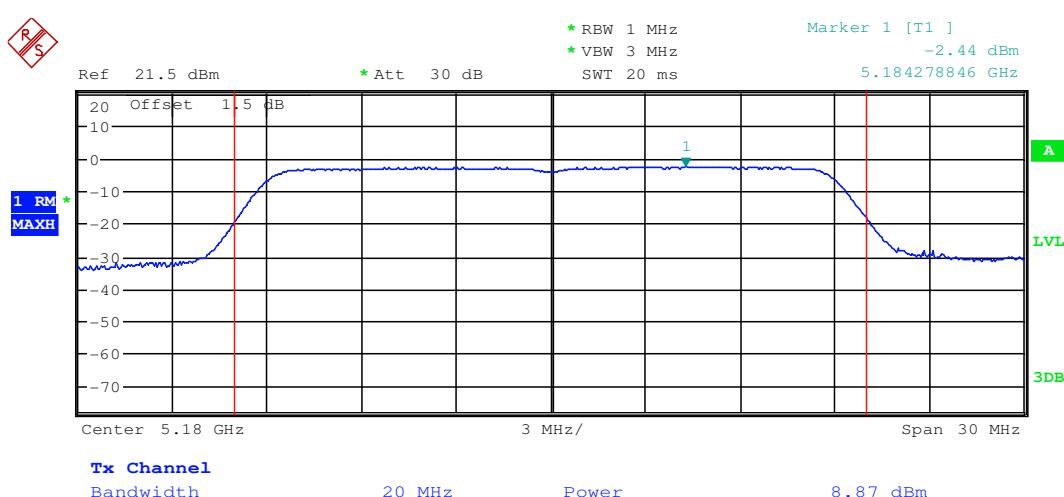


Test mode:	802.11n(HT20)	Frequency(MHz):	5180
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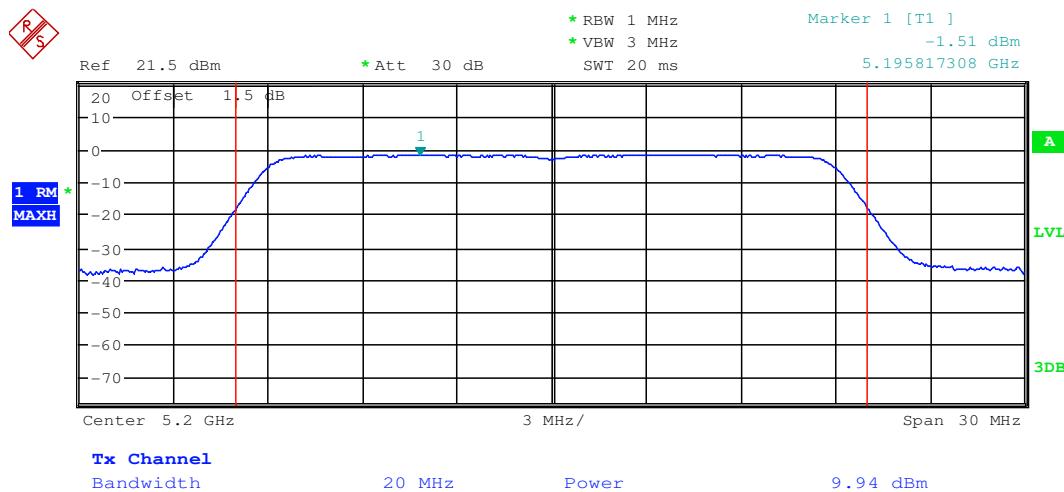
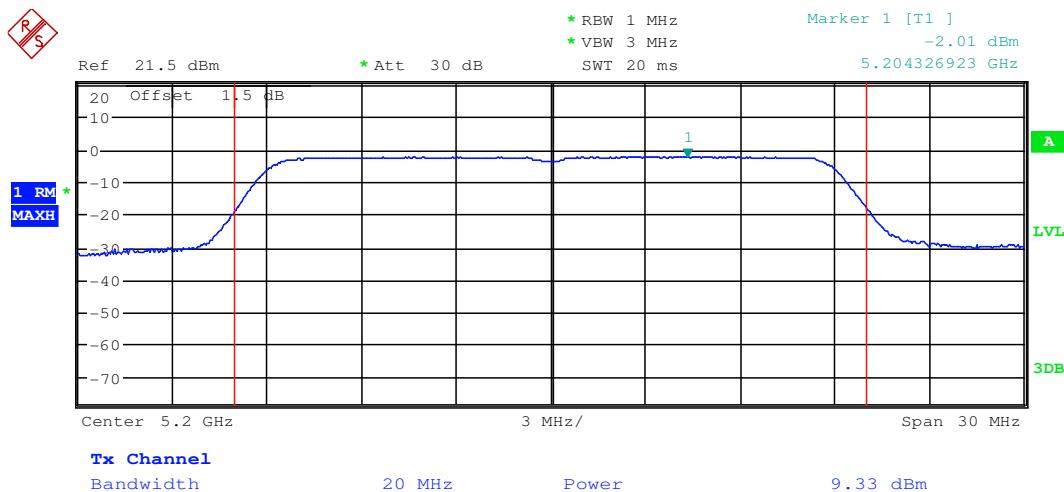
Antenna 0



Antenna 1

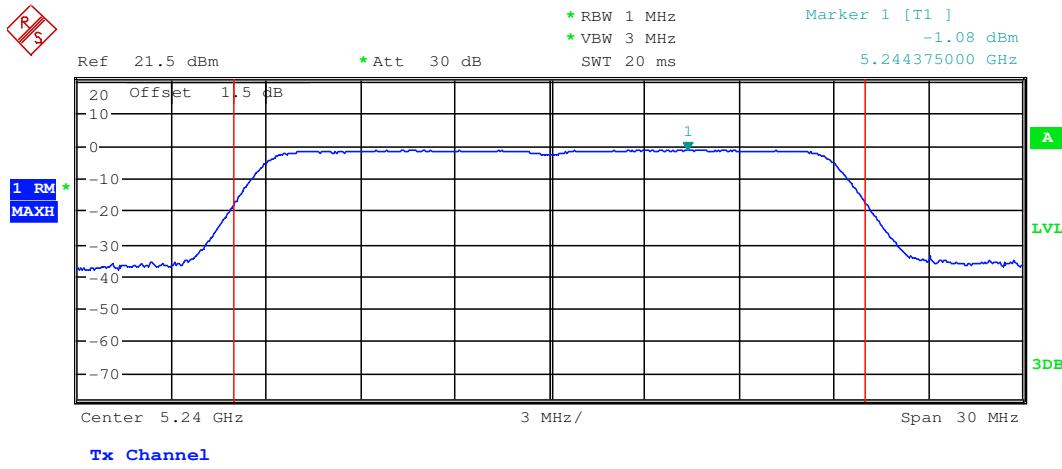


Test mode:	802.11n(HT20)	Frequency(MHz):	5200
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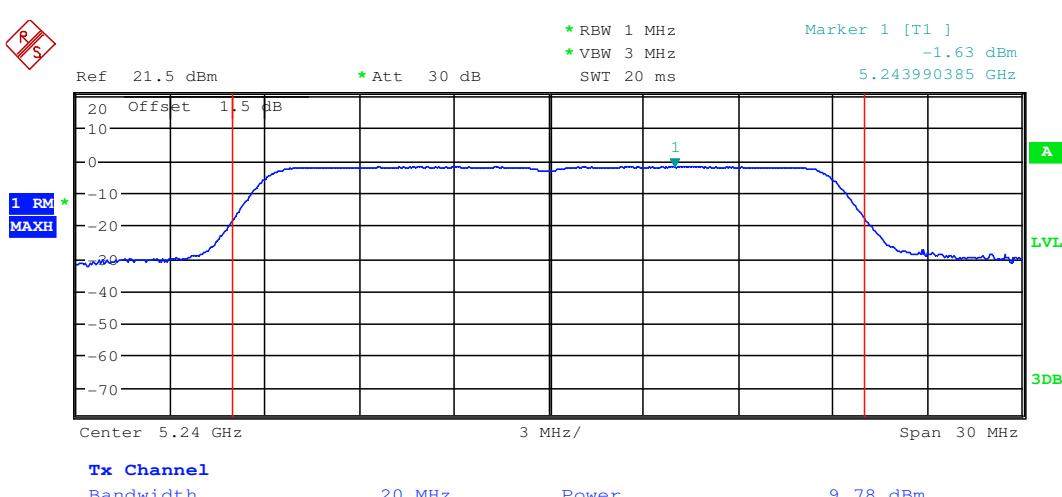
Antenna 0

Antenna 1


Test mode:	802.11n(HT20)	Frequency(MHz):	5240
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Antenna 0

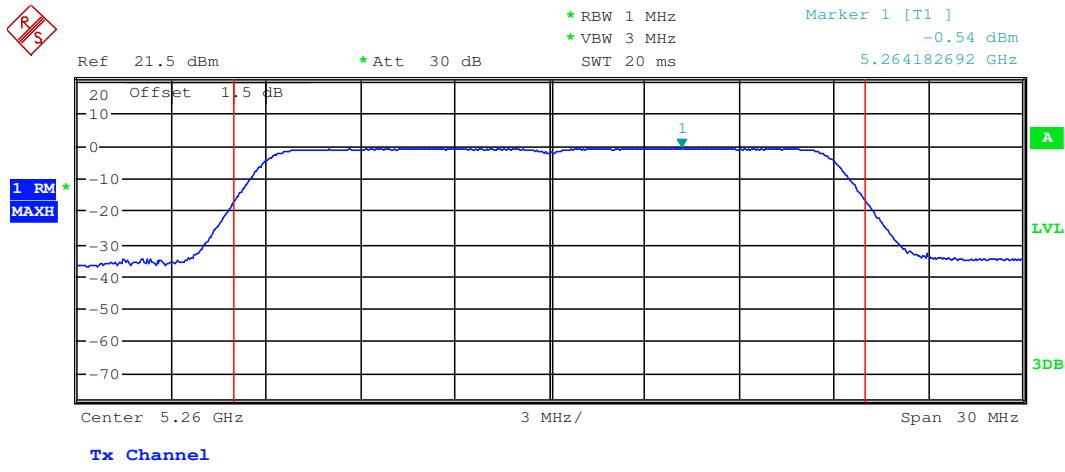


Antenna 1

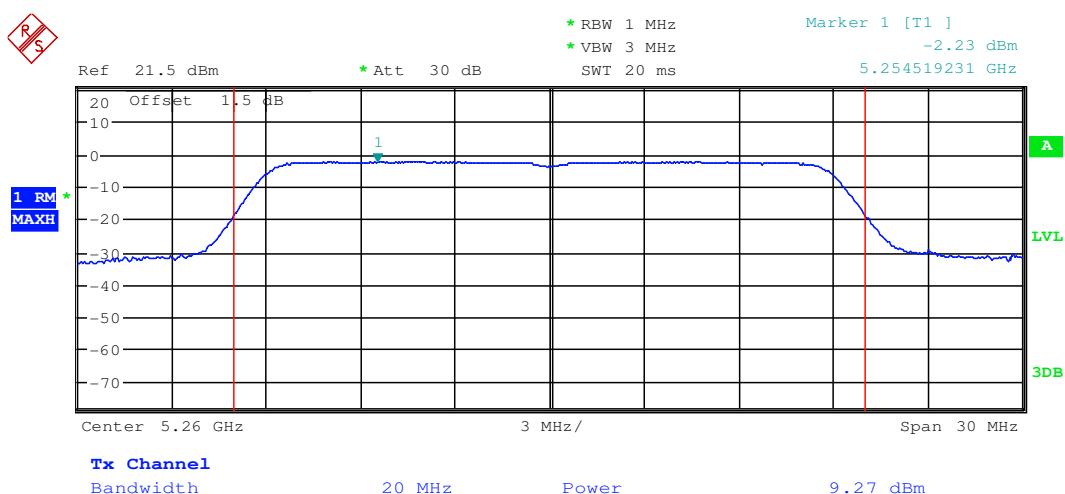


Test mode:	802.11n(HT20)	Frequency(MHz):	5260
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Antenna 0

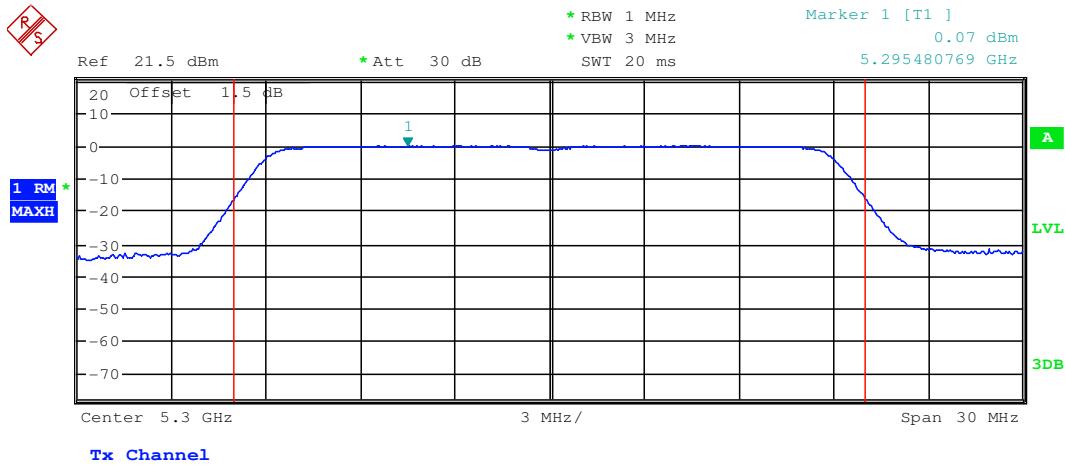


Antenna 1

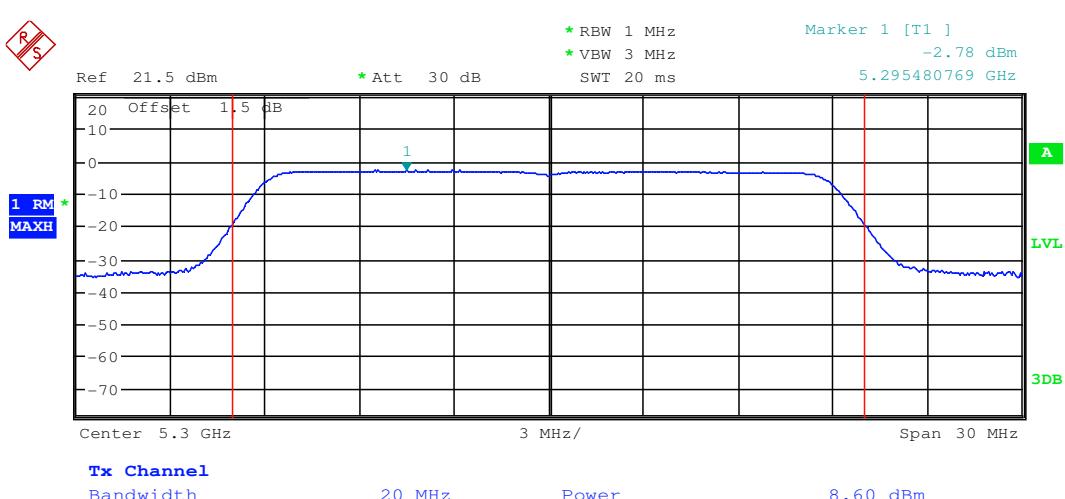


Test mode:	802.11n(HT20)	Frequency(MHz):	5300
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Antenna 0

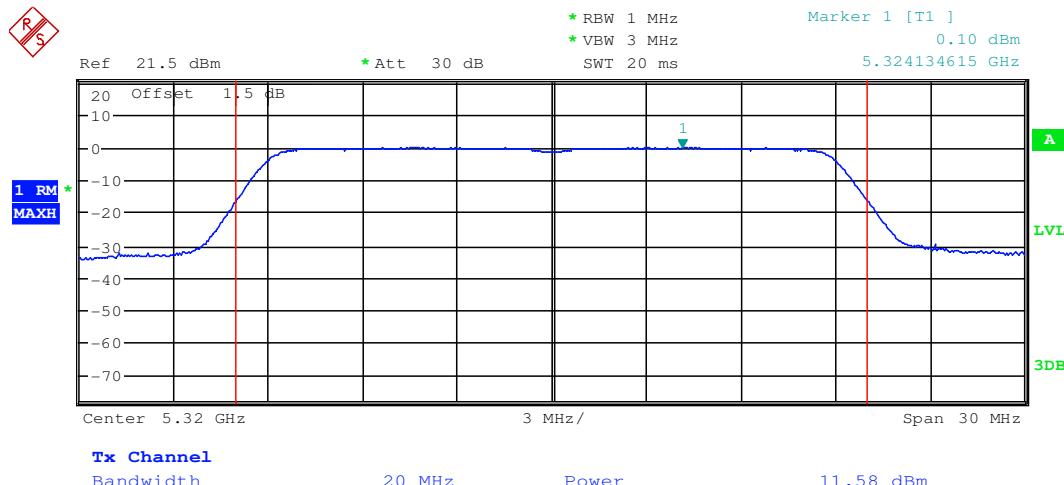


Antenna 1

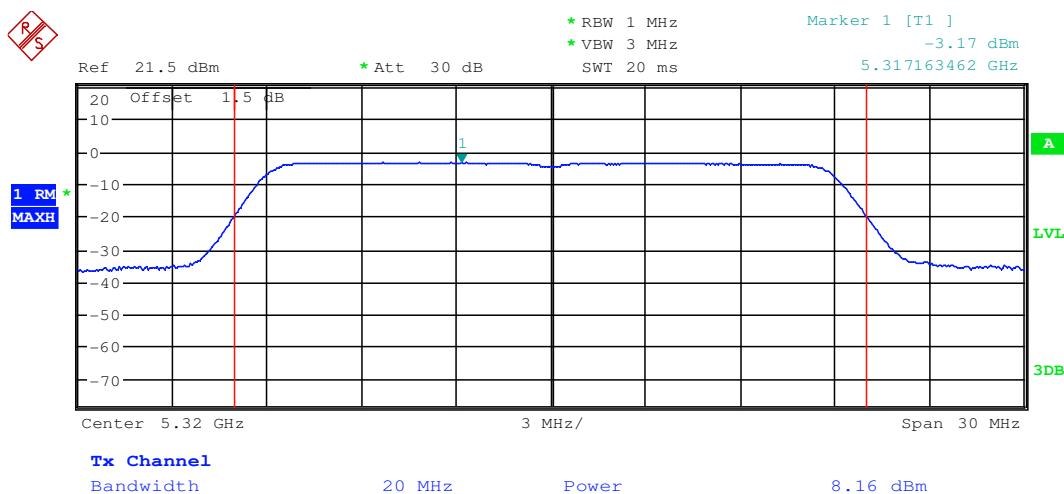


Test mode:	802.11n(HT20)	Frequency(MHz):	5320
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Antenna 0

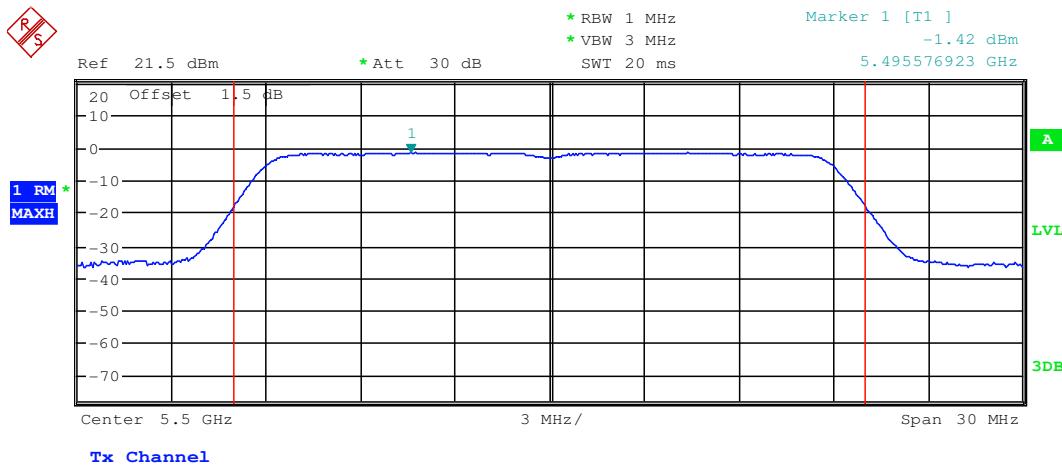


Antenna 1

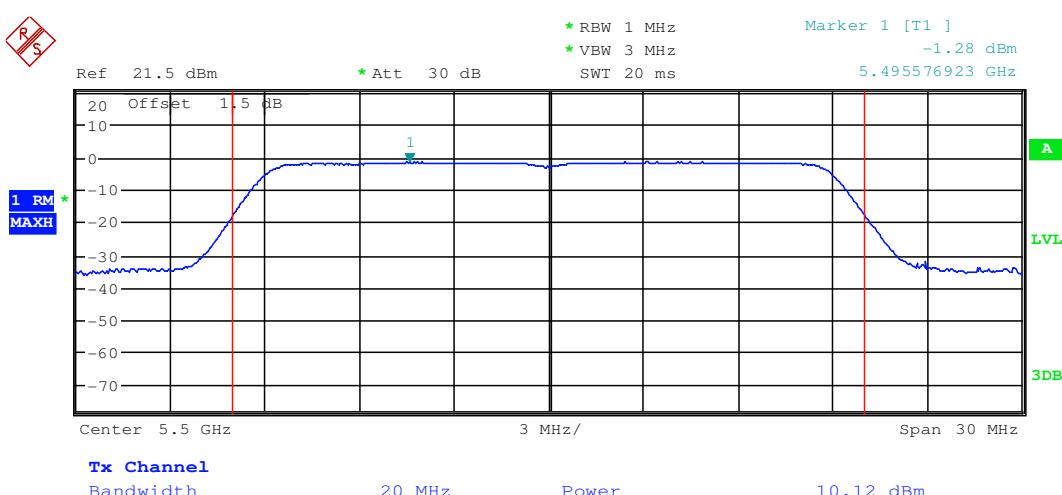


Test mode:	802.11n(HT20)	Frequency(MHz):	5500
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Antenna 0

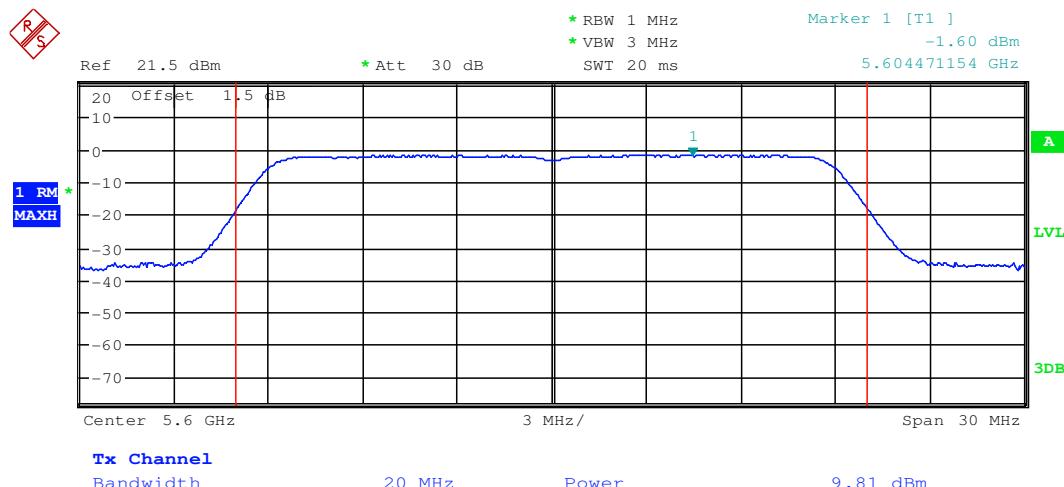


Antenna 1

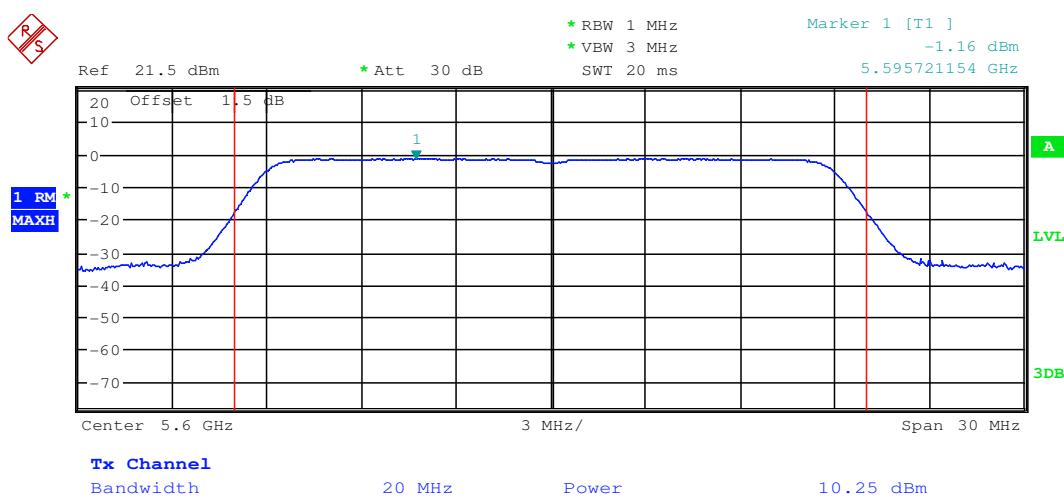


Test mode:	802.11n(HT20)	Frequency(MHz):	5600
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Antenna 0

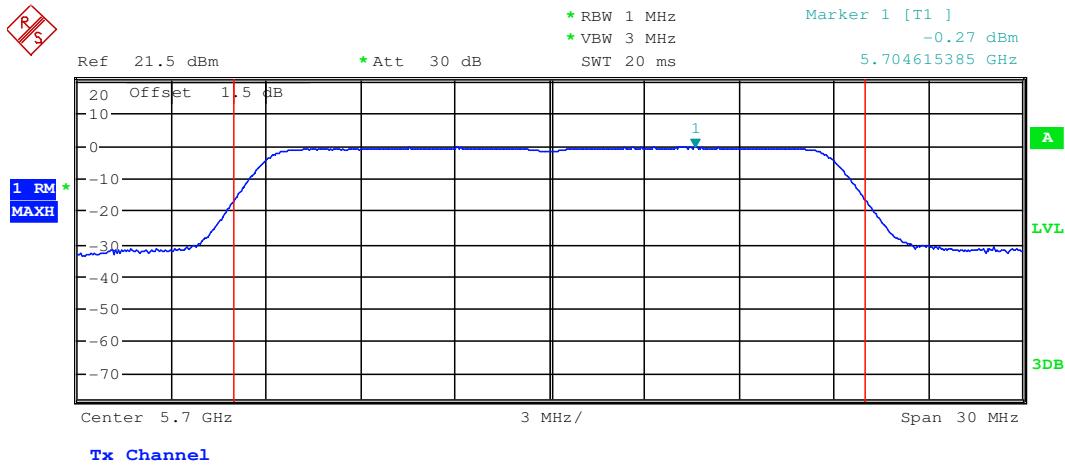


Antenna 1

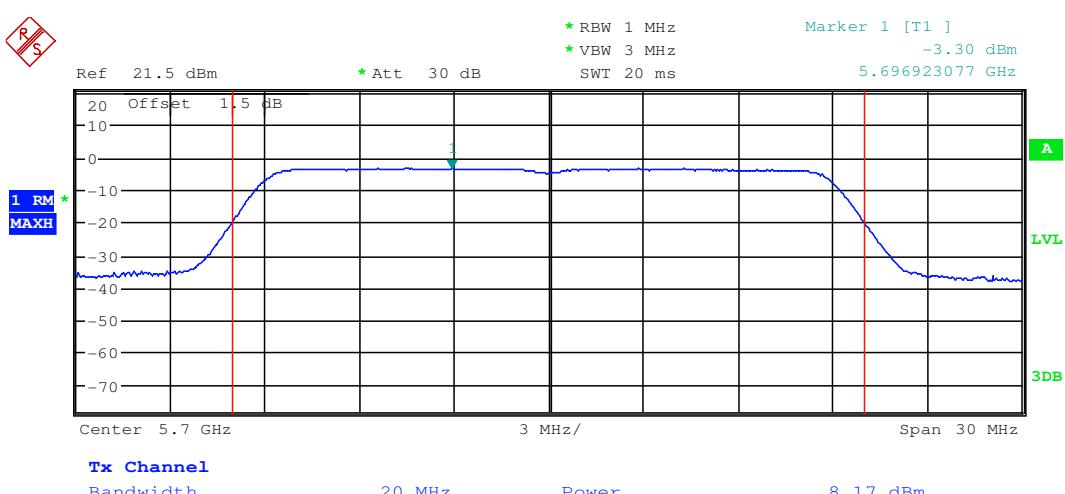


Test mode:	802.11n(HT20)	Frequency(MHz):	5700
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Antenna 0

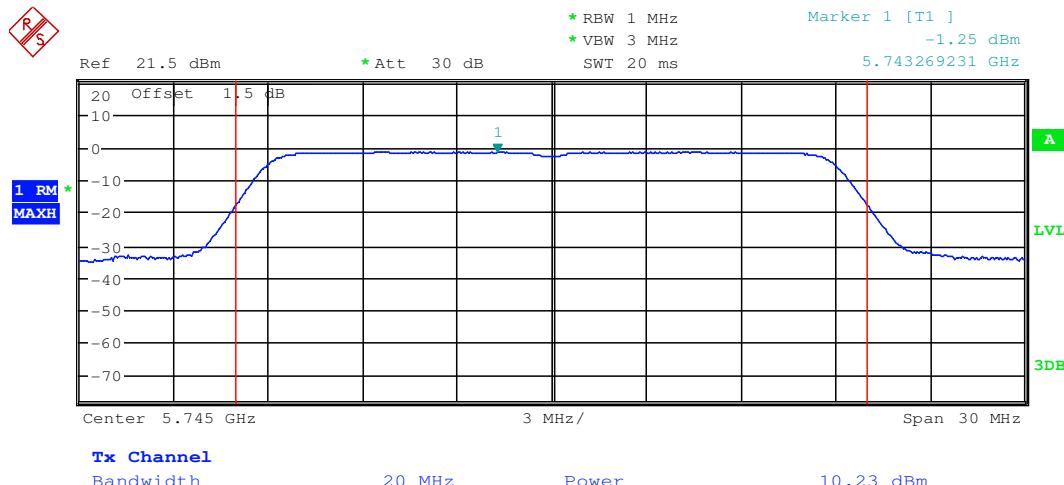


Antenna 1

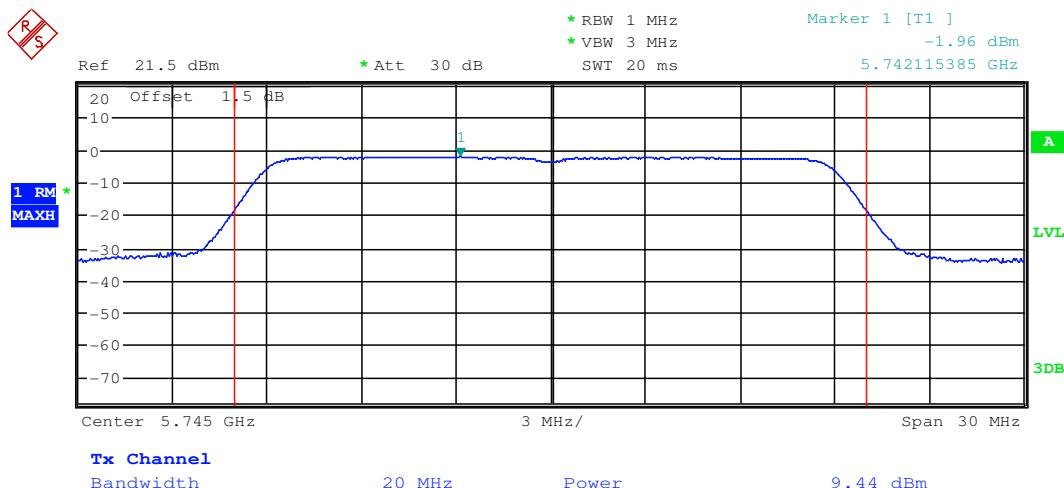


Test mode:	802.11n(HT20)	Frequency(MHz):	5745
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Antenna 0

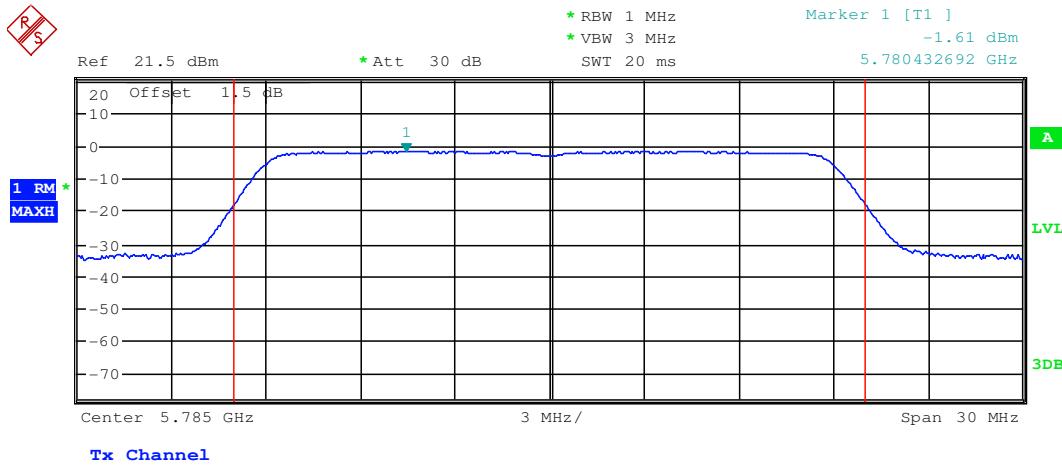


Antenna 1

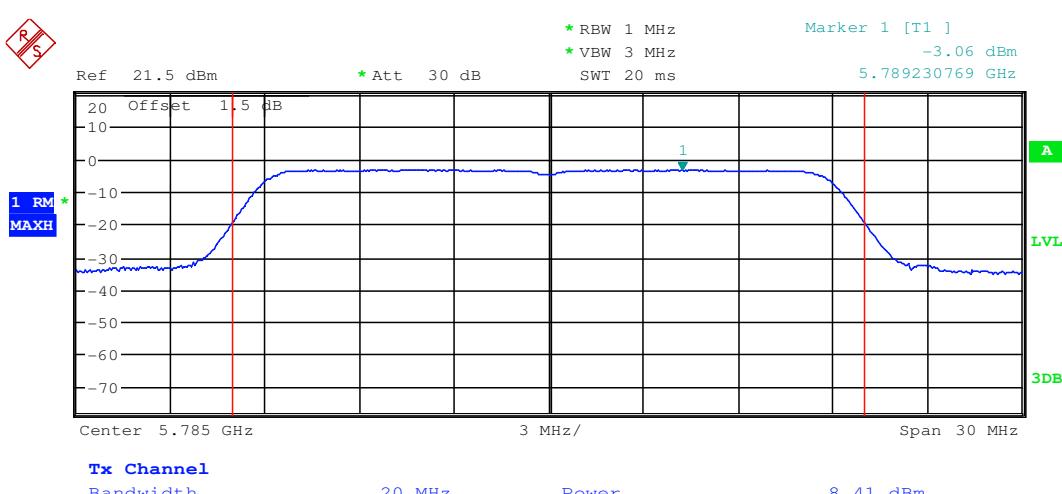


Test mode:	802.11n(HT20)	Frequency(MHz):	5785
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Antenna 0

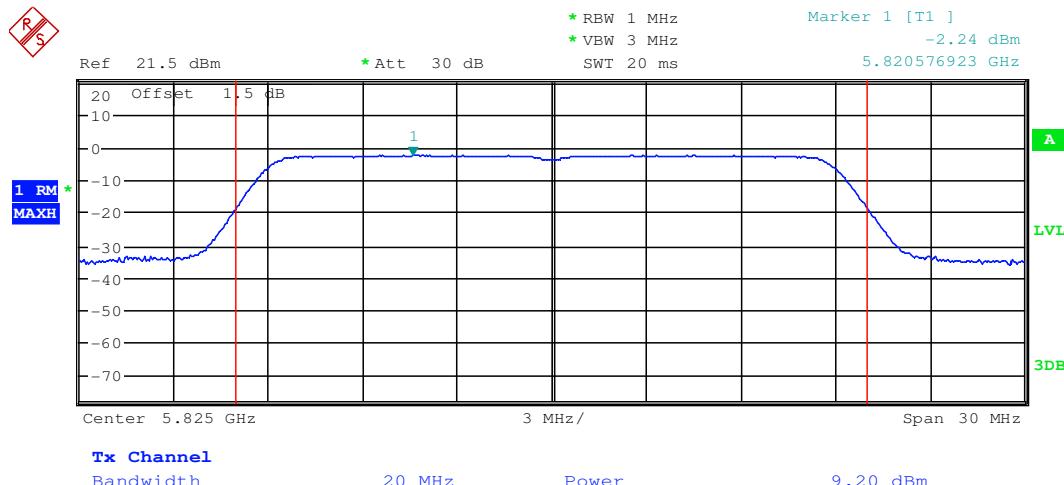


Antenna 1

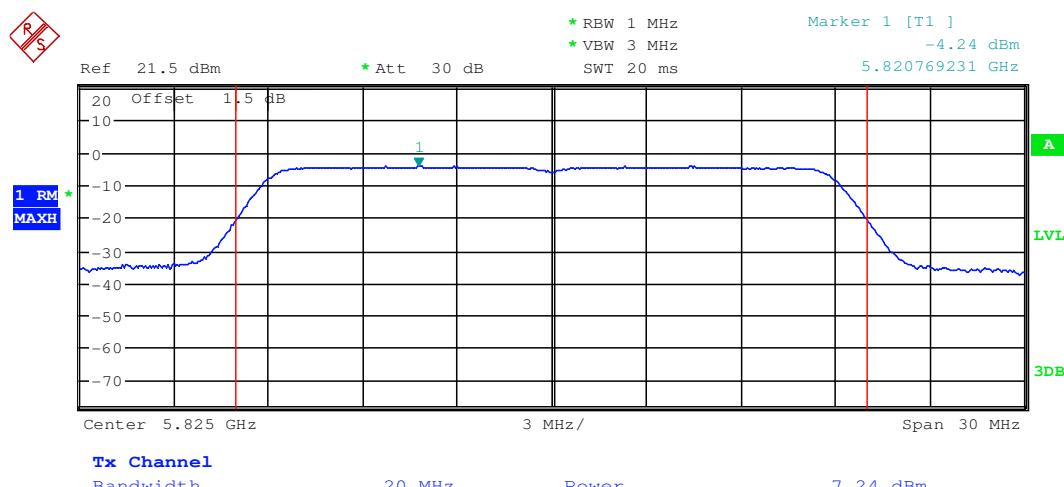


Test mode:	802.11n(HT20)	Frequency(MHz):	5825
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Antenna 0

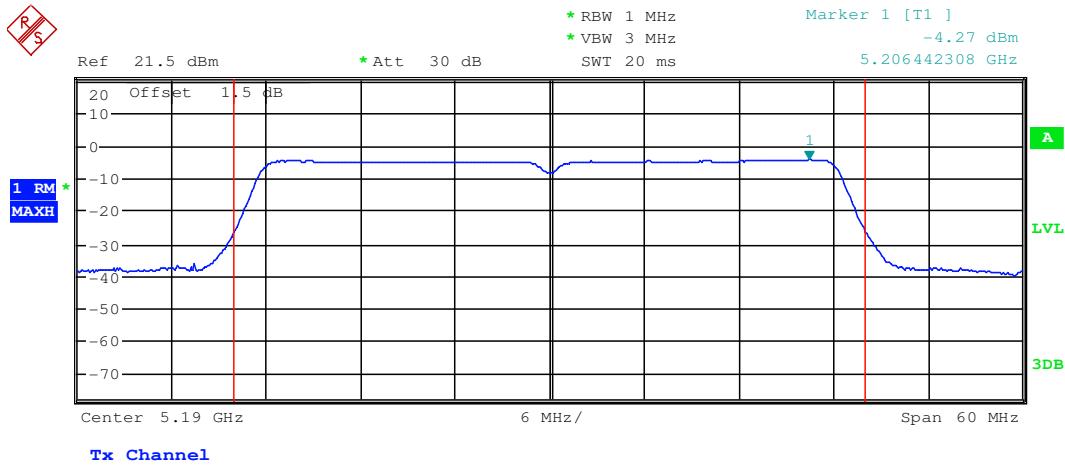


Antenna 1

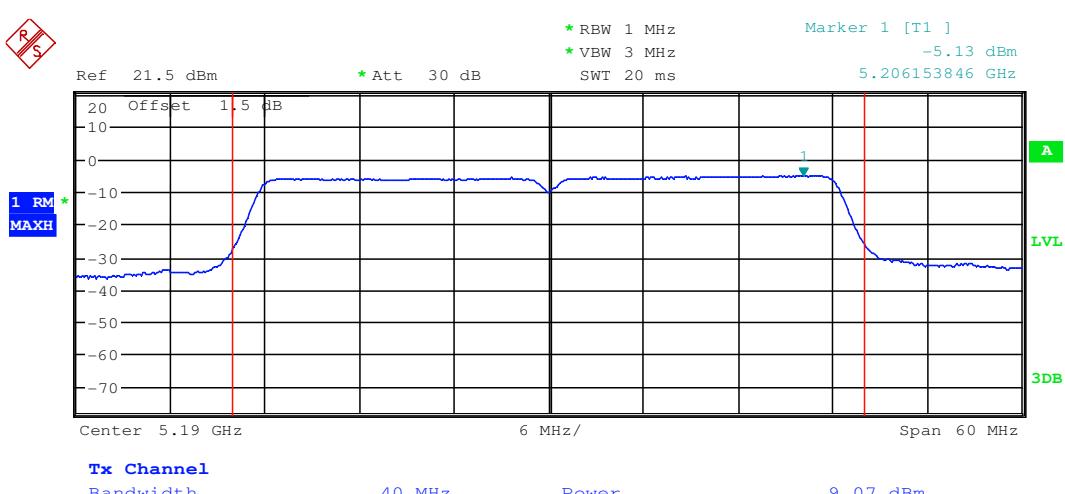


Test mode:	802.11n(HT40)	Frequency(MHz):	5190
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Antenna 0

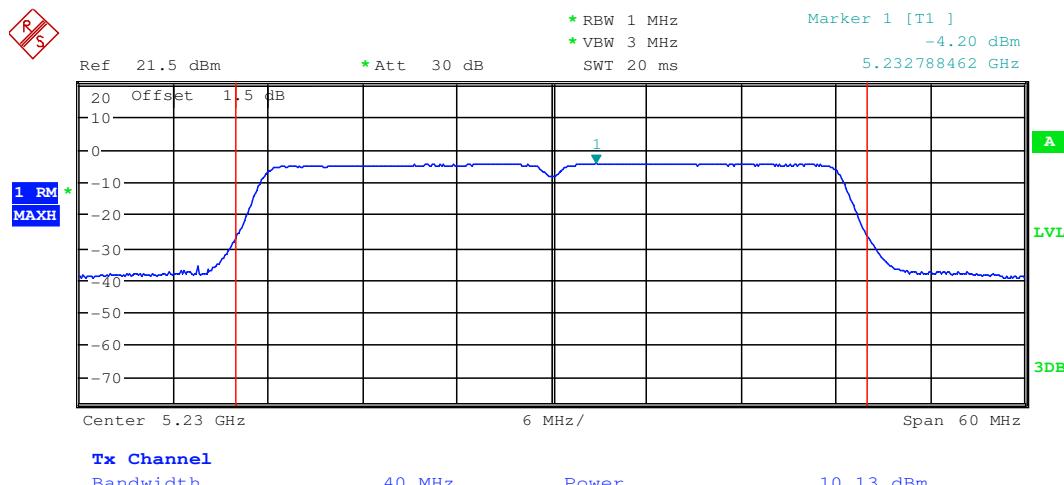


Antenna 1

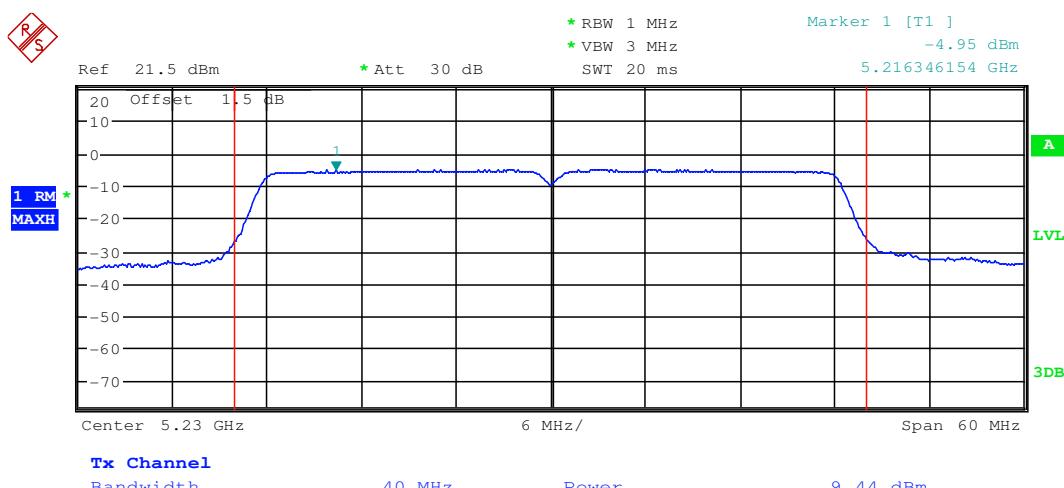


Test mode:	802.11n(HT40)	Frequency(MHz):	5230
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Antenna 0

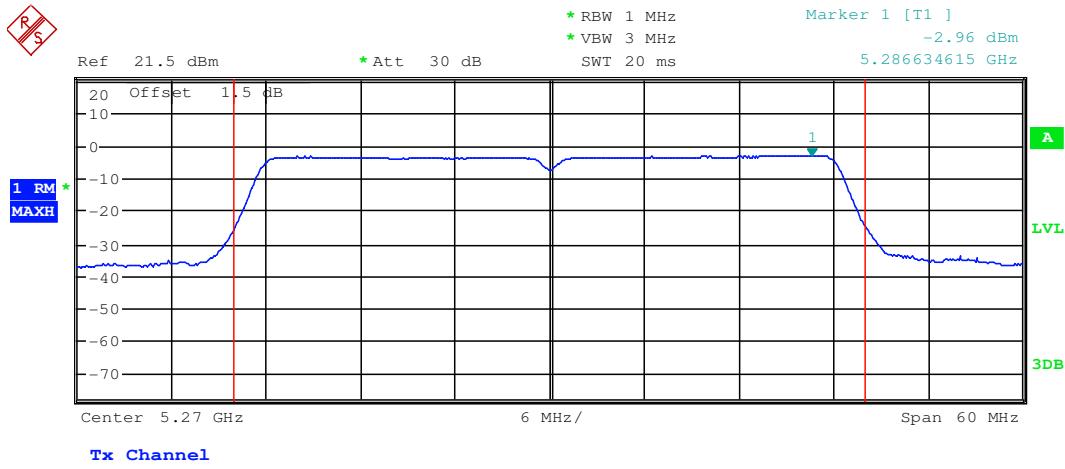


Antenna 1

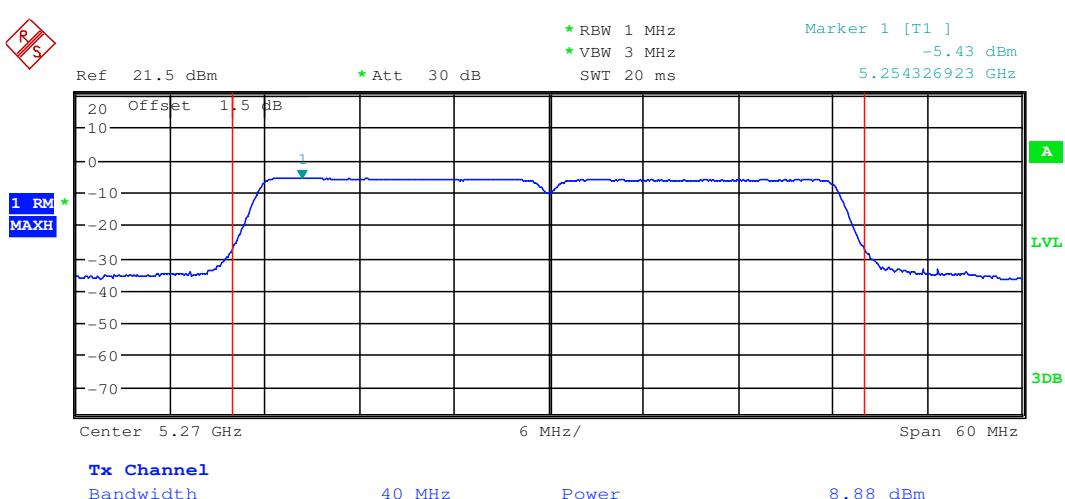


Test mode:	802.11n(HT40)	Frequency(MHz):	5270
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Antenna 0

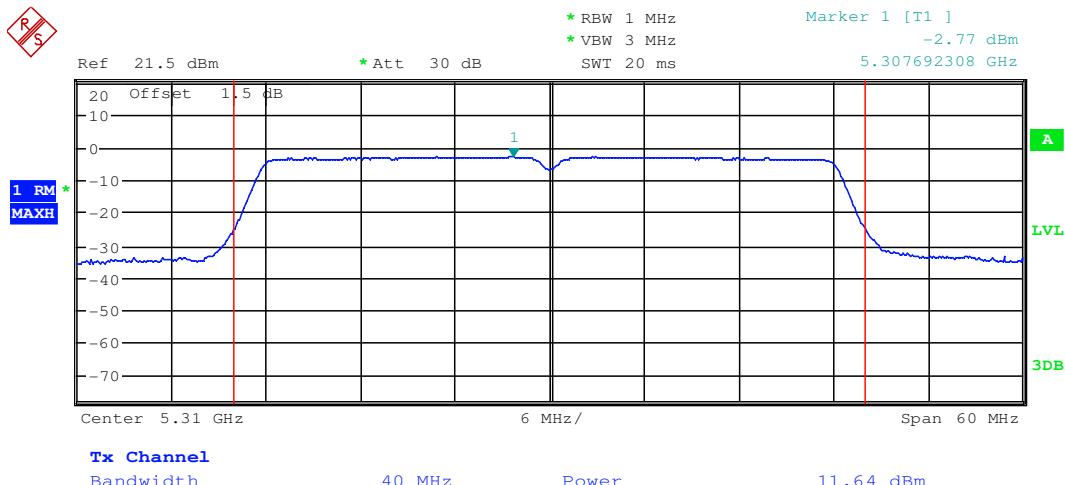


Antenna 1

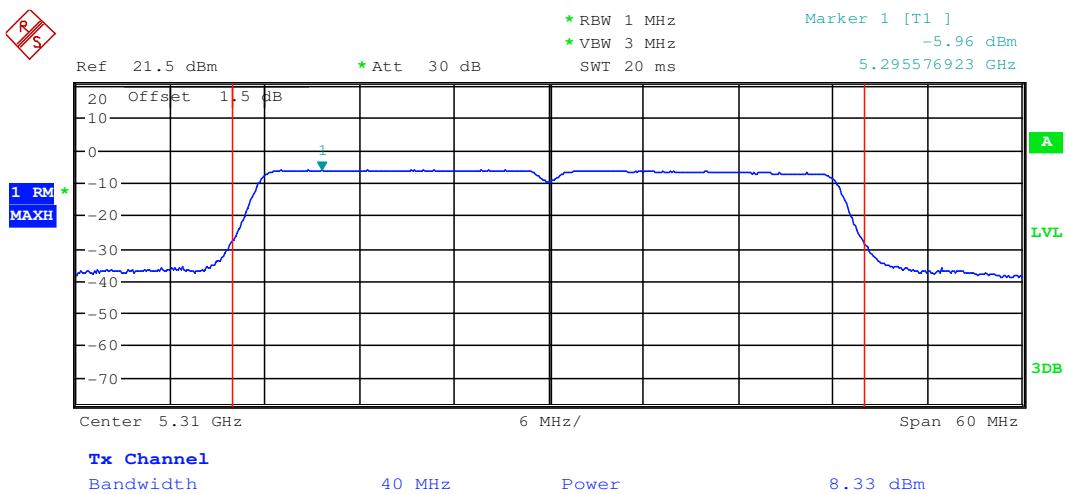


Test mode:	802.11n(HT40)	Frequency(MHz):	5310
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Antenna 0

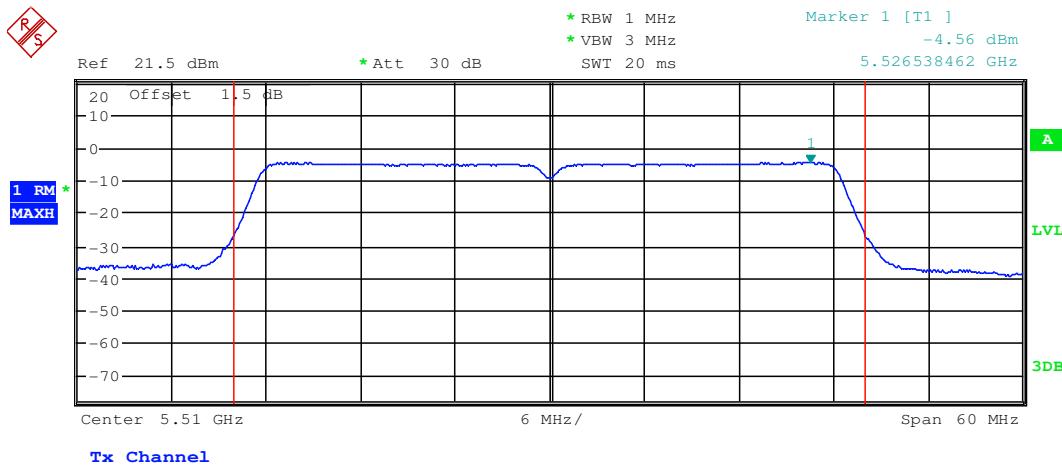


Antenna 1

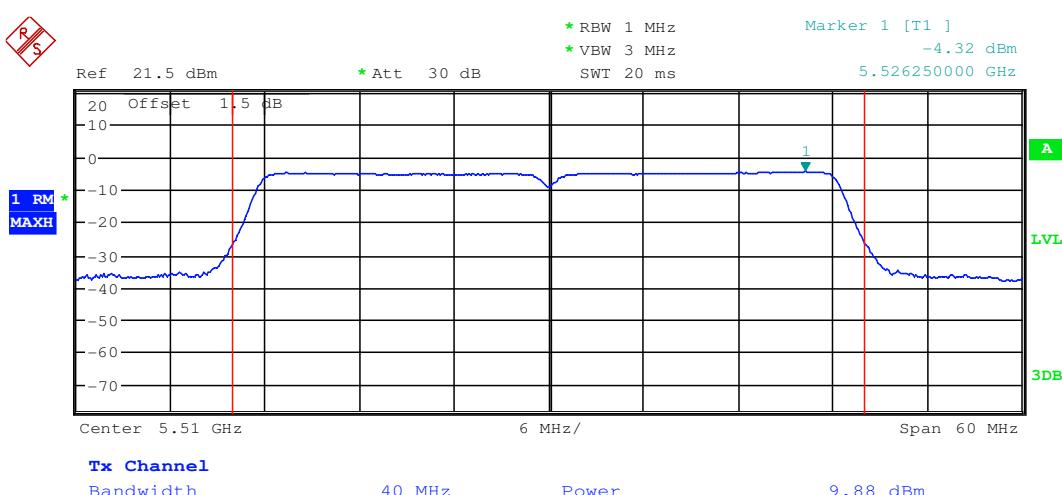


Test mode:	802.11n(HT40)	Frequency(MHz):	5510
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Antenna 0

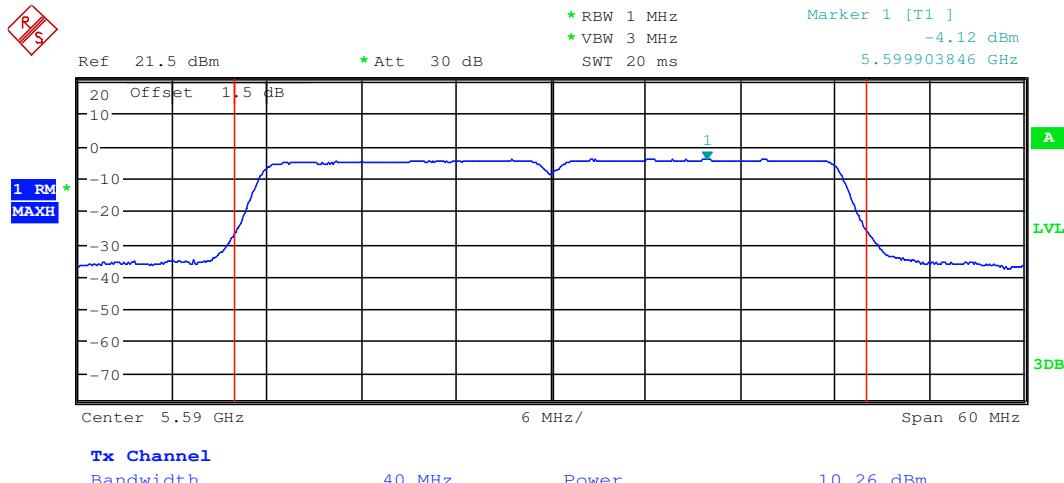


Antenna 1

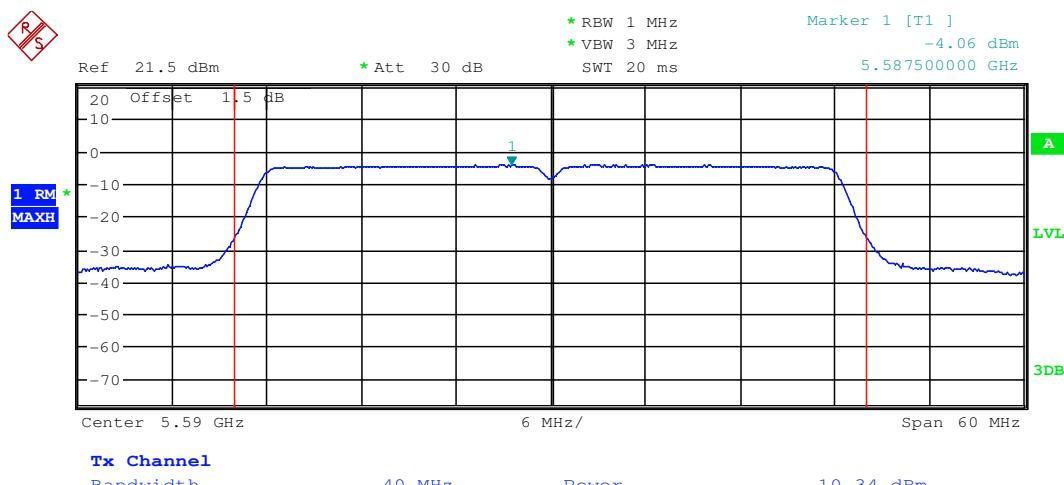


Test mode:	802.11n(HT40)	Frequency(MHz):	5590
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Antenna 0

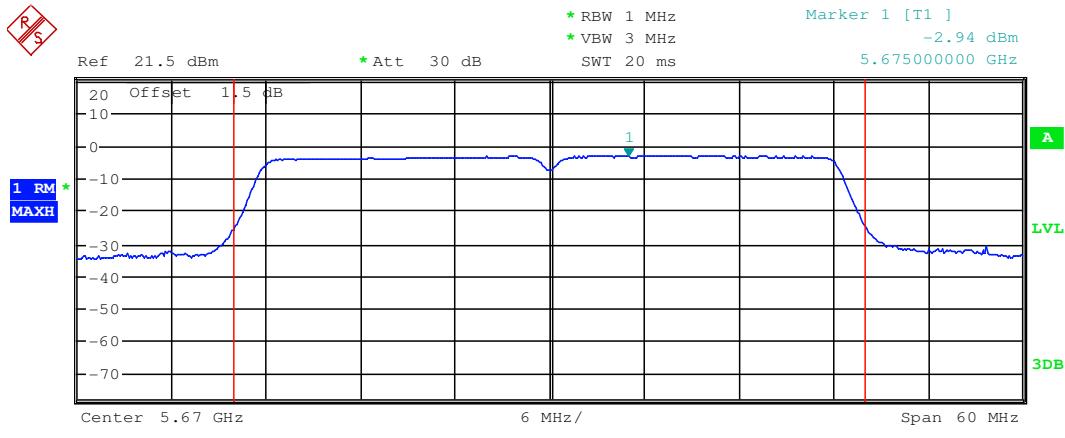


Antenna 1

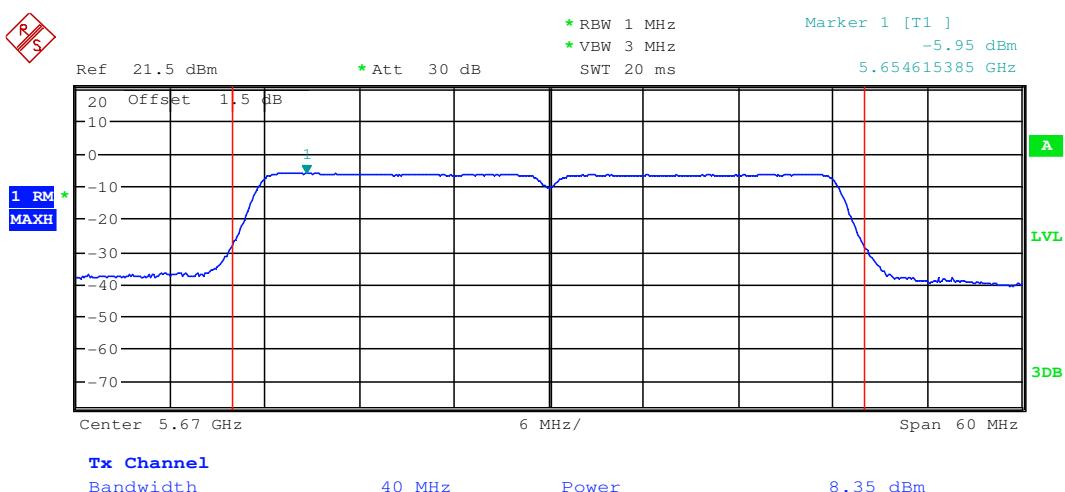


Test mode:	802.11n(HT40)	Frequency(MHz):	5670
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Antenna 0

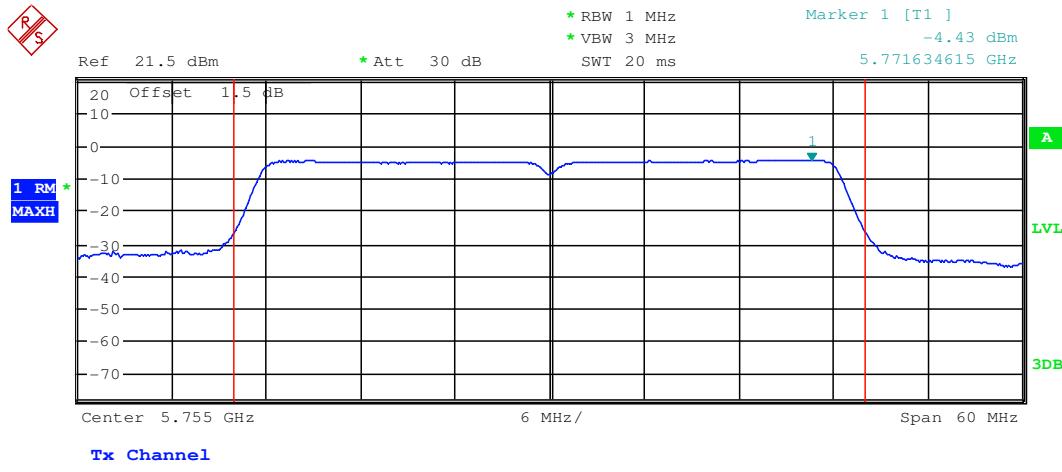


Antenna 1

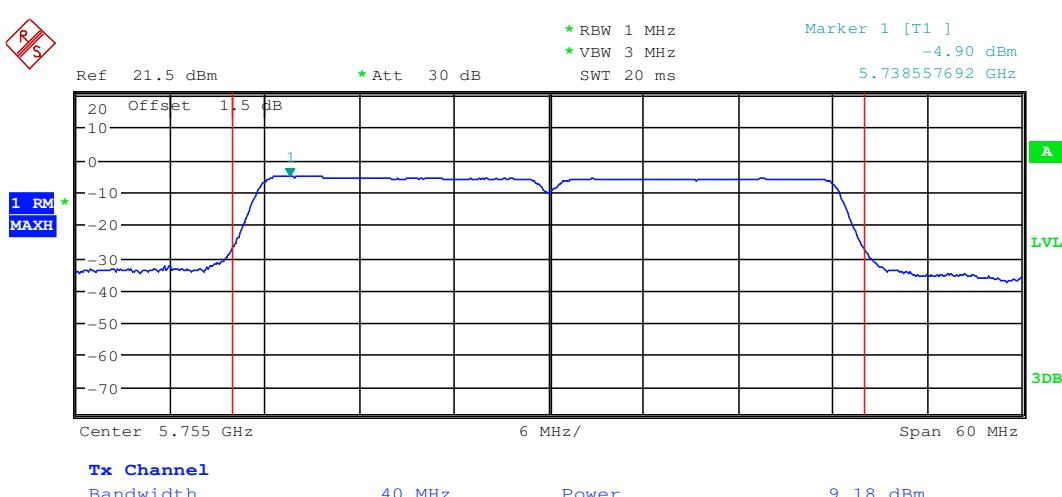


Test mode:	802.11n(HT40)	Frequency(MHz):	5755
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Antenna 0

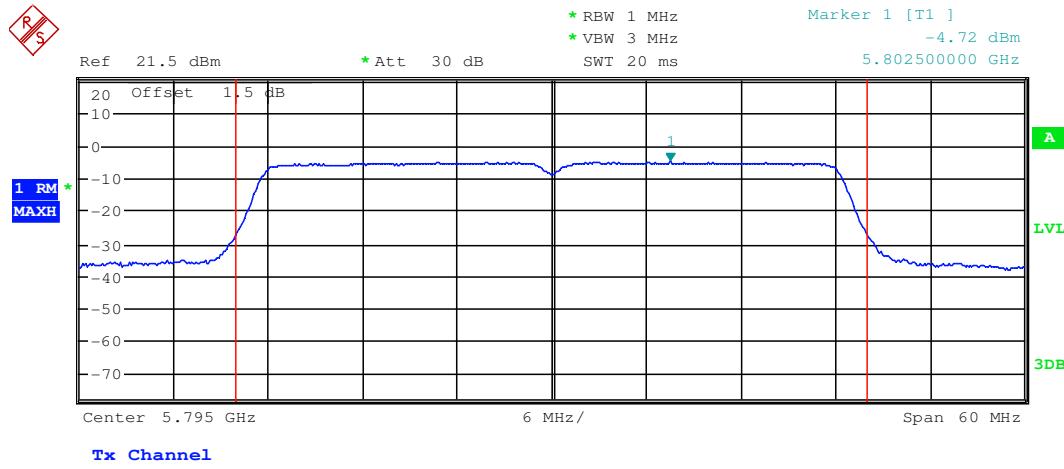


Antenna 1

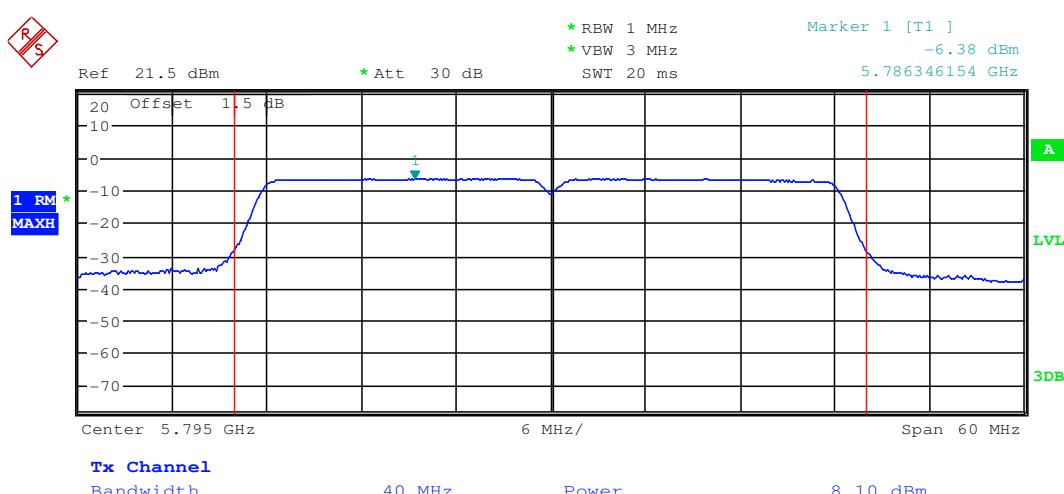


Test mode:	802.11n(HT40)	Frequency(MHz):	5795
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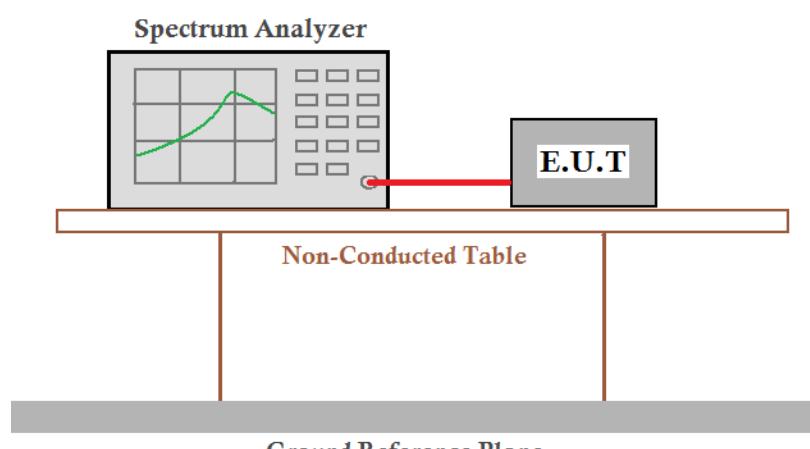
Antenna 0



Antenna 1



6.4 26dB Emission Bandwidth and 99% Occupied Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(a)
Test Method:	ANSI C63.10: 2013
Test Setup:	
Instruments Used:	Refer to section 5.10 for details.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40). Only the worst case is recorded in the report. Pre-scan was performed at Antenna 0 and Antenna 1, no worst case was found. Only the test data of Antenna 0 was shown in this report.
Limit:	No restriction limits.
Test Results:	Pass



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Report No.: SZEM150700437303
Page: 55 of 193

Measurement Data:

802.11a mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	19.952	16.490
5200	19.952	16.490
5240	19.904	16.490
5260	19.952	16.490
5300	22.692	16.538
5320	22.596	16.538
5500	20.336	16.538
5600	22.933	16.538
5700	24.663	16.538
5745	20.433	16.538
5785	20.337	16.538
5825	20.385	16.538

802.11n(HT20) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	20.288	17.740
5200	20.240	17.740
5240	20.240	17.740
5260	20.192	17.740
5300	20.288	17.740
5320	20.385	17.740
5500	20.240	17.740
5600	20.192	17.740
5700	20.240	17.740
5745	20.240	17.740
5785	20.337	17.740
5825	20.385	17.740



**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303

Page: 56 of 193

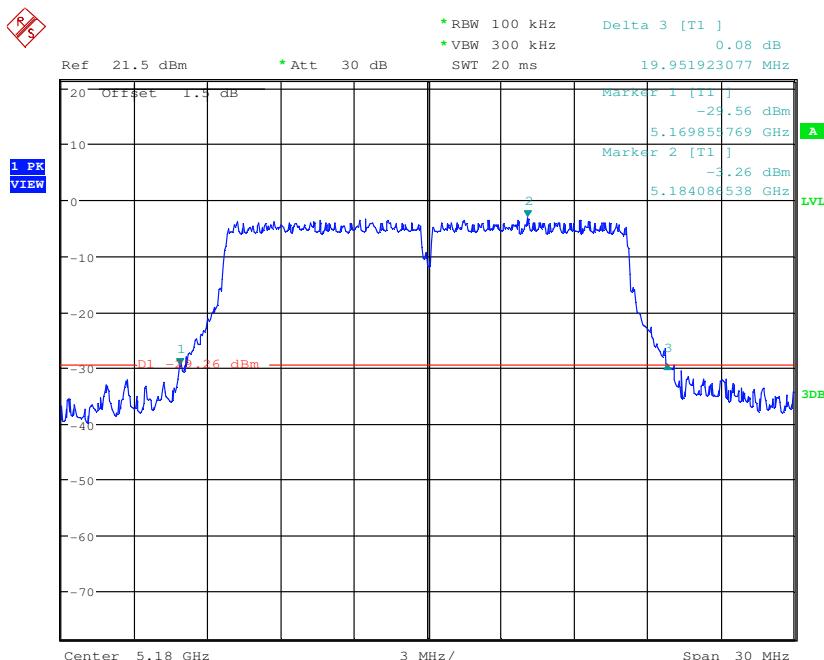
802.11n(HT40) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	40.385	36.346
5230	40.288	36.346
5270	40.192	36.346
5310	40.577	36.346
5510	40.481	36.346
5590	40.481	36.346
5670	40.769	36.346
5755	40.288	36.346
5795	40.577	36.346

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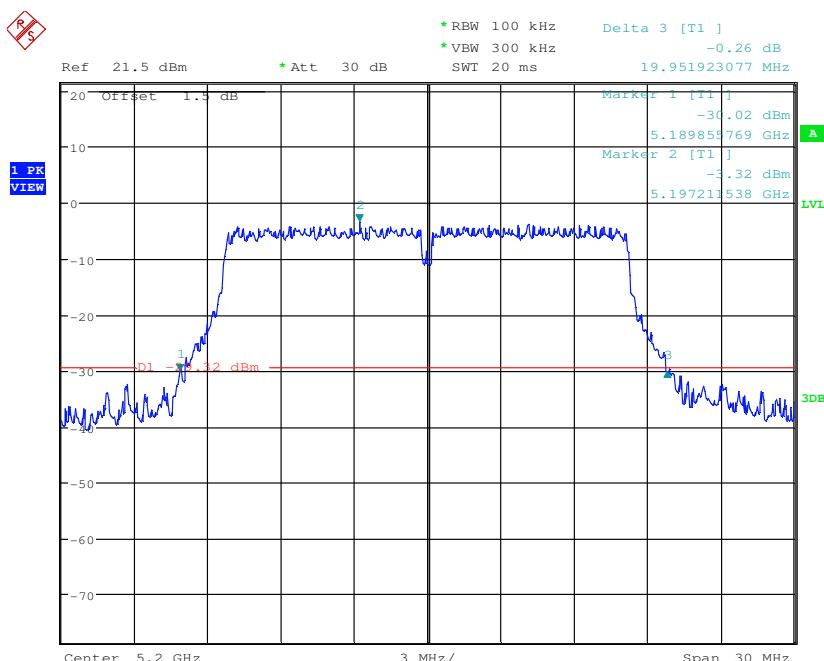
26dB Emission Bandwidth

Test plot as follows:

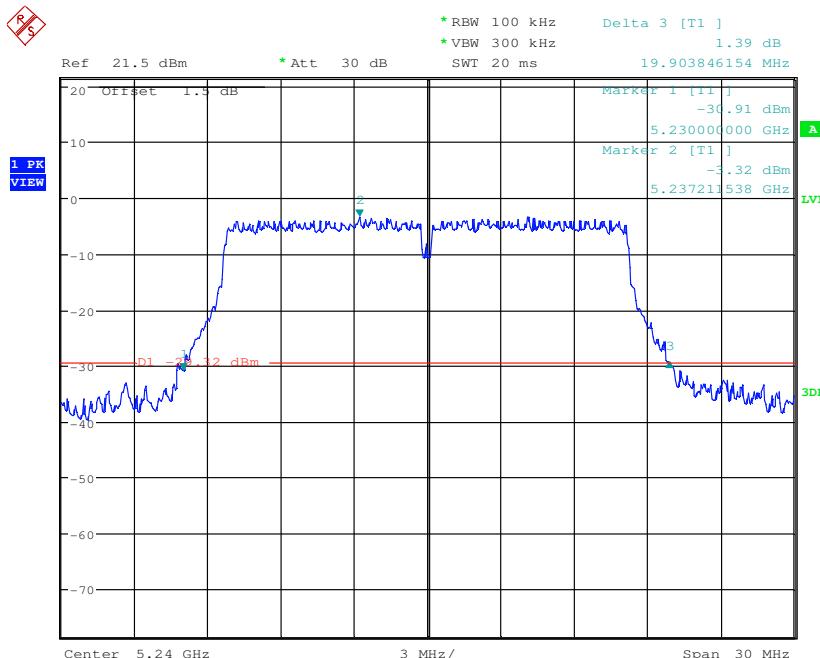
Test mode:	802.11a	Frequency(MHz):	5180
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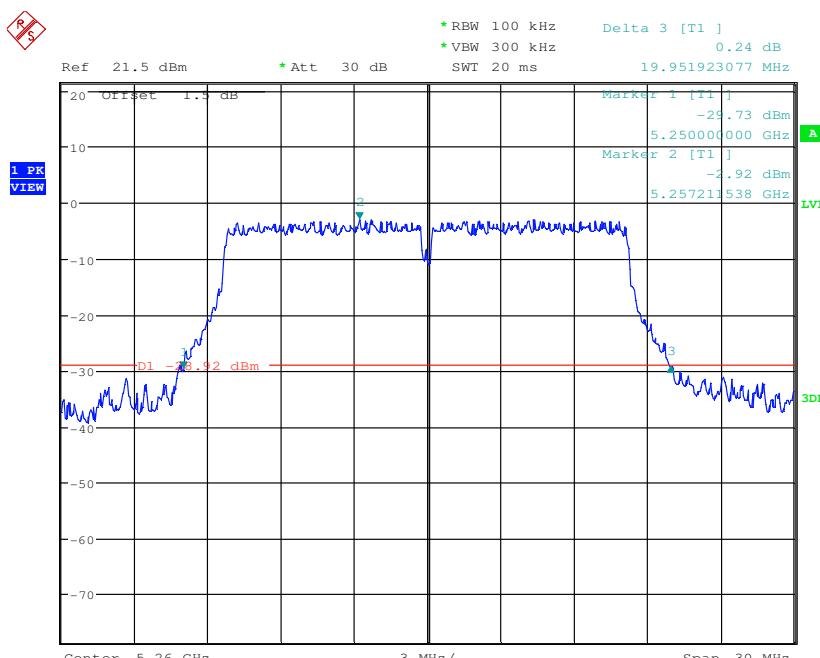
Test mode:	802.11a	Frequency(MHz):	5200
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Test mode:	802.11a	Frequency(MHz):	5240
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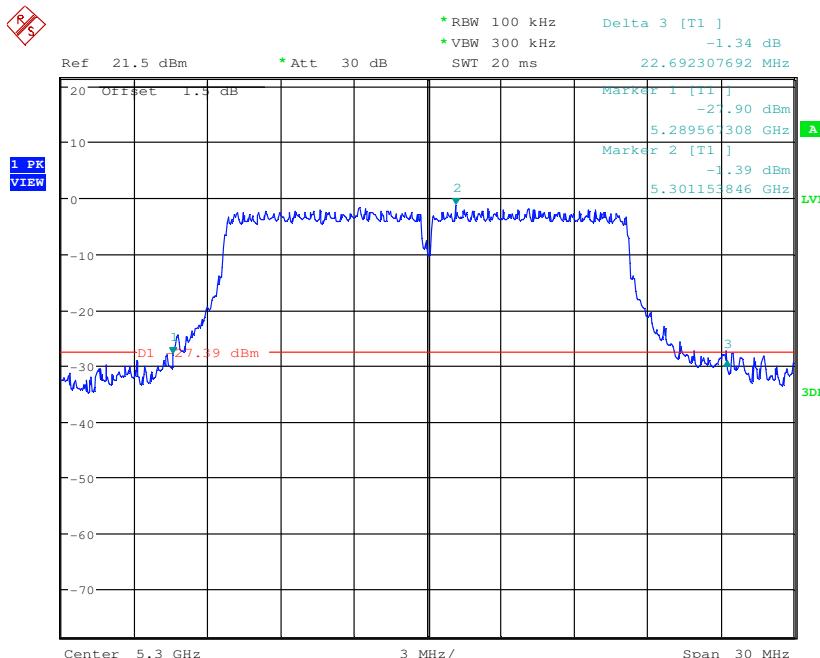


Test mode:	802.11a	Frequency(MHz):	5260
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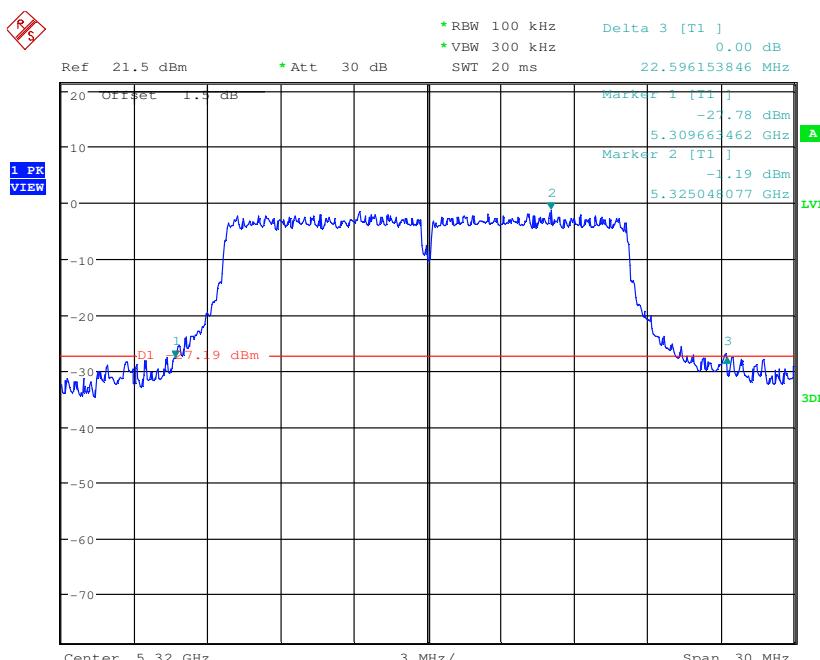


Report No.: SZEM150700437303
Page: 59 of 193

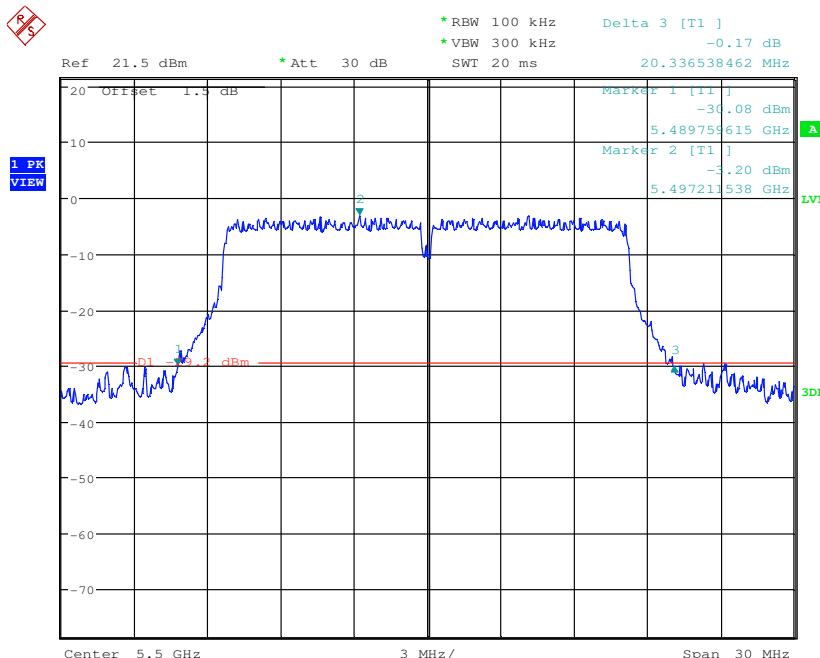
Test mode:	802.11a	Frequency(MHz):	5300
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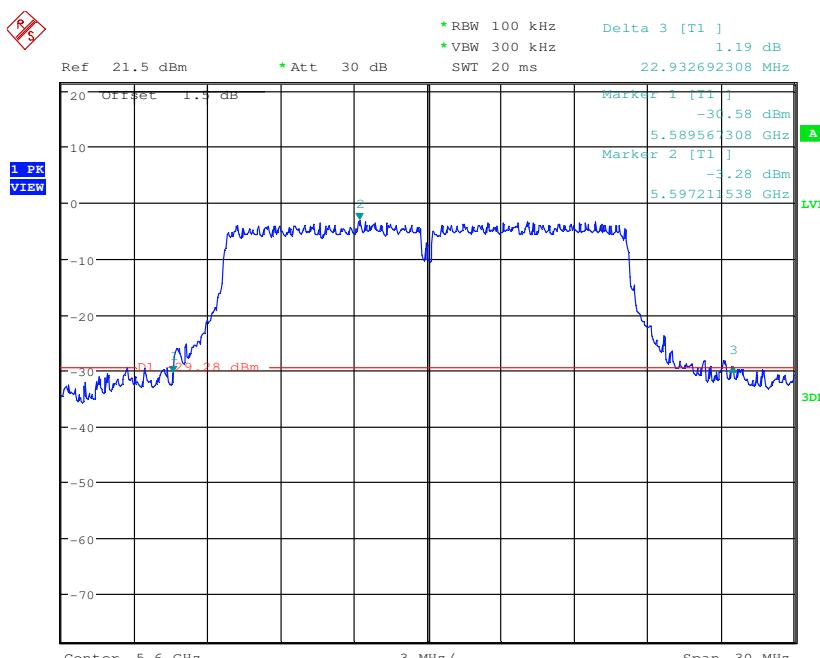
Test mode:	802.11a	Frequency(MHz):	5320
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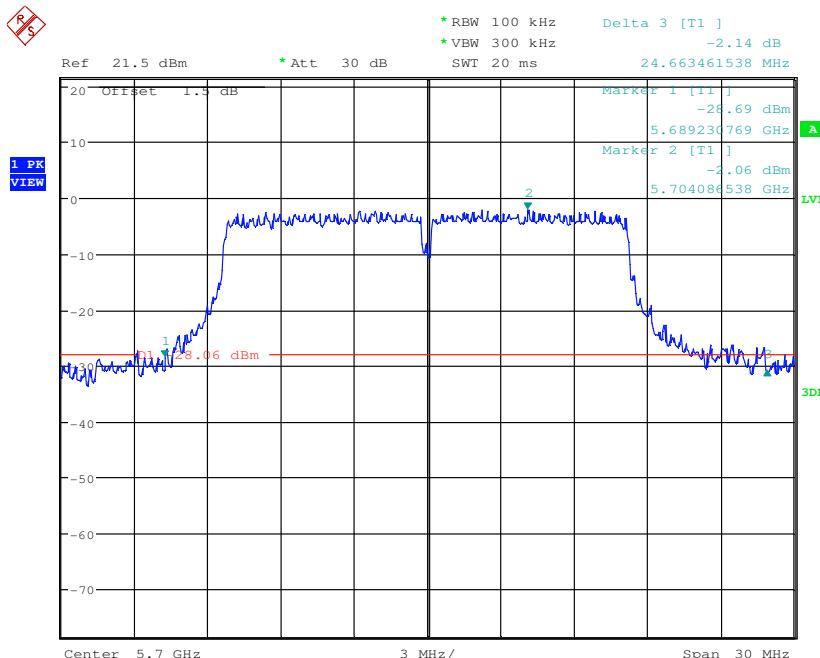
Test mode:	802.11a	Frequency(MHz):	5500
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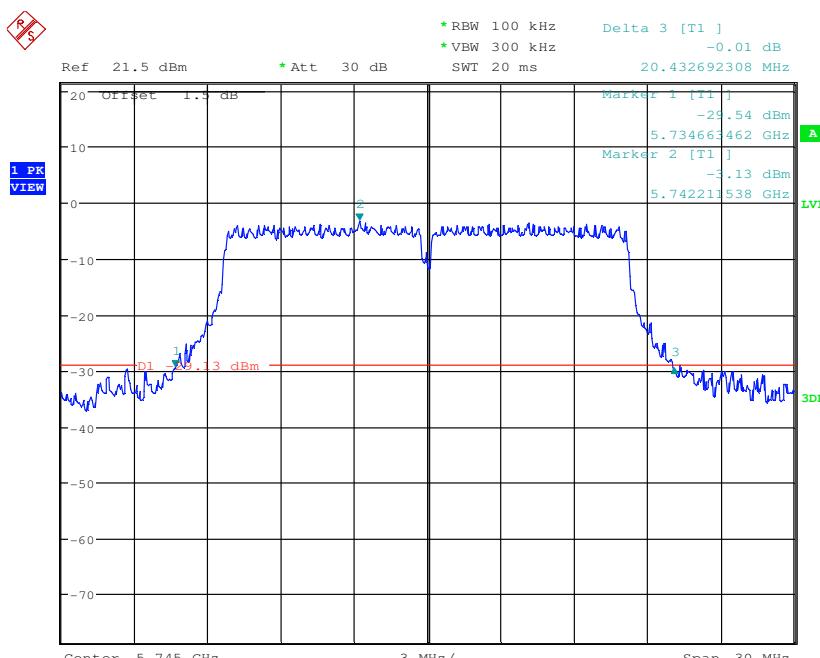
Test mode:	802.11a	Frequency(MHz):	5600
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Test mode:	802.11a	Frequency(MHz):	5700
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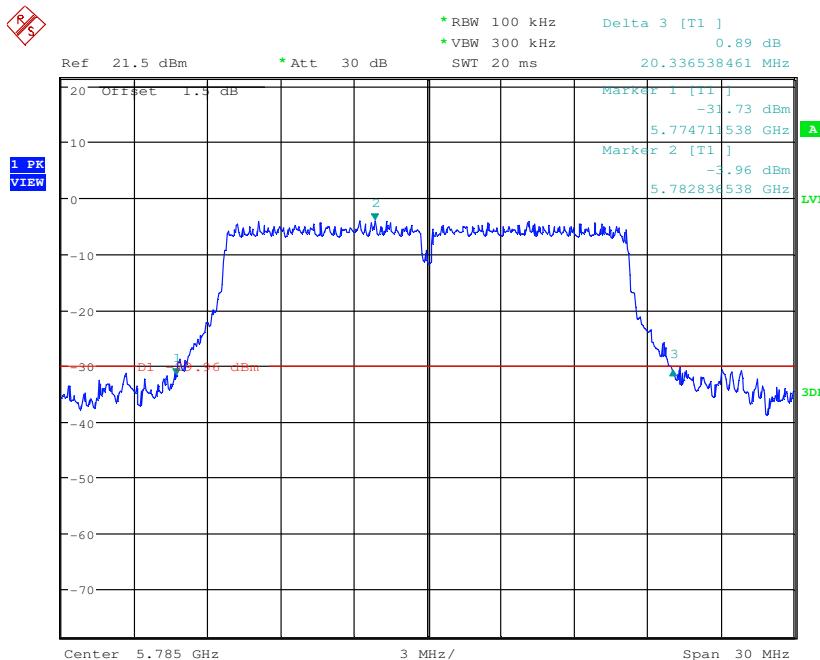


Test mode:	802.11a	Frequency(MHz):	5745
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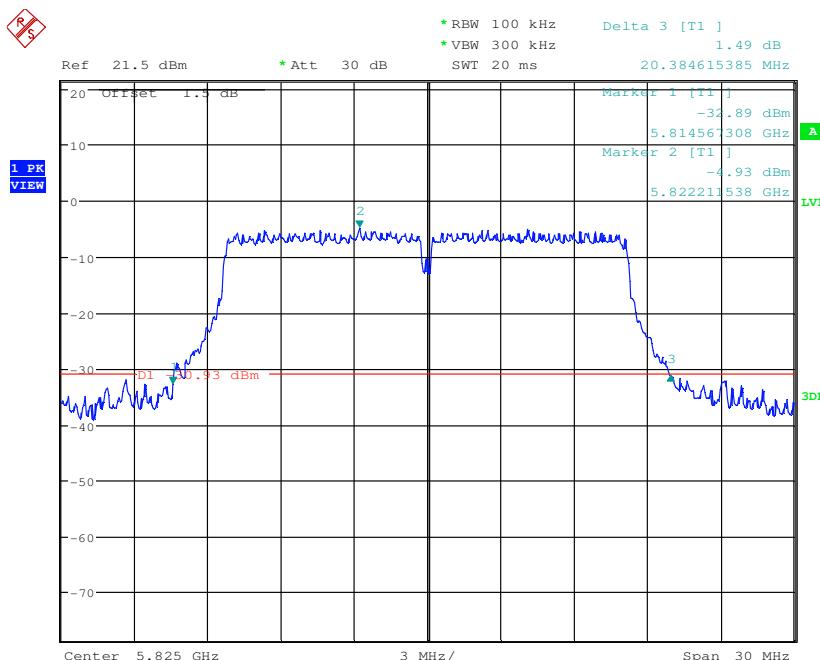


Report No.: SZEM150700437303
Page: 62 of 193

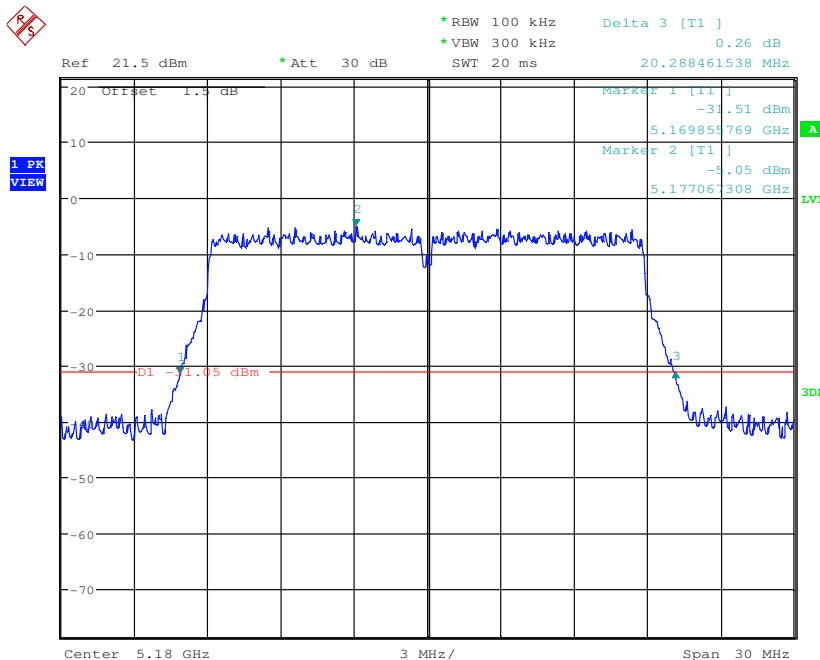
Test mode:	802.11a	Frequency(MHz):	5785
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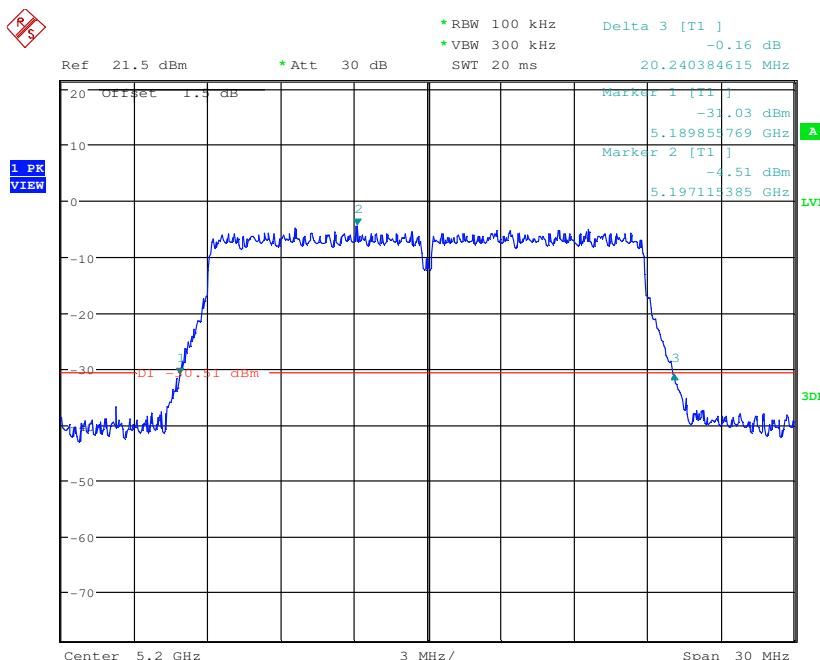
Test mode:	802.11a	Frequency(MHz):	5825
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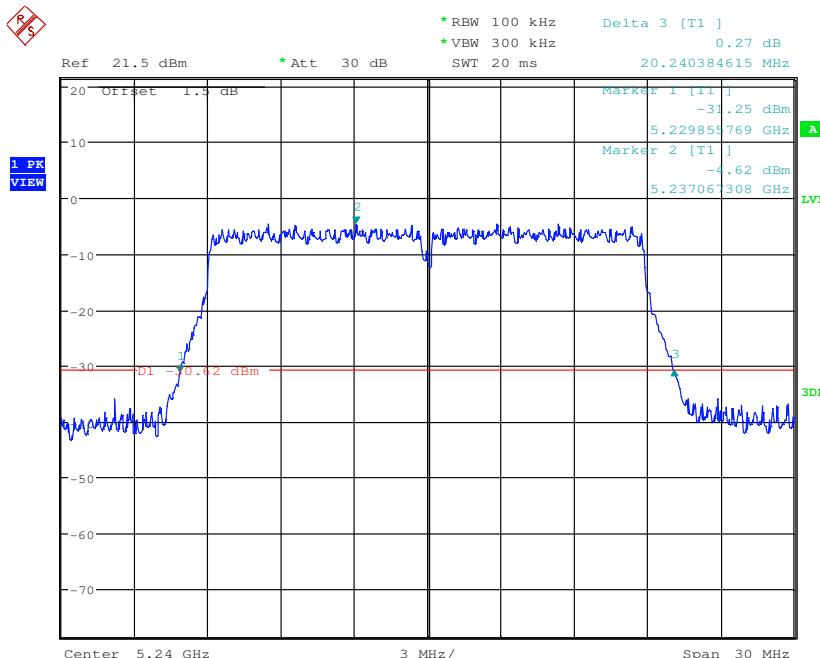
Test mode:	802.11n(HT20)	Frequency(MHz):	5180
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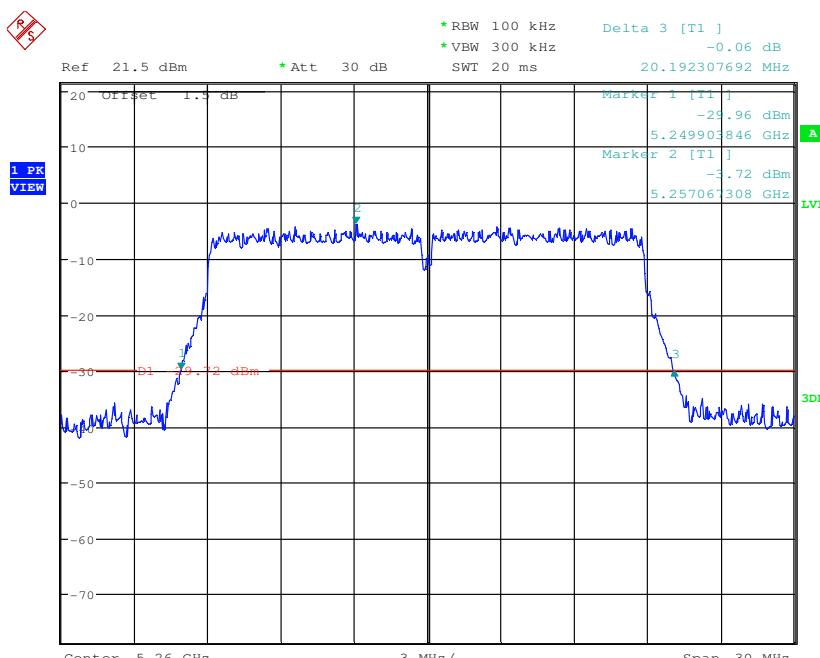
Test mode:	802.11n(HT20)	Frequency(MHz):	5200
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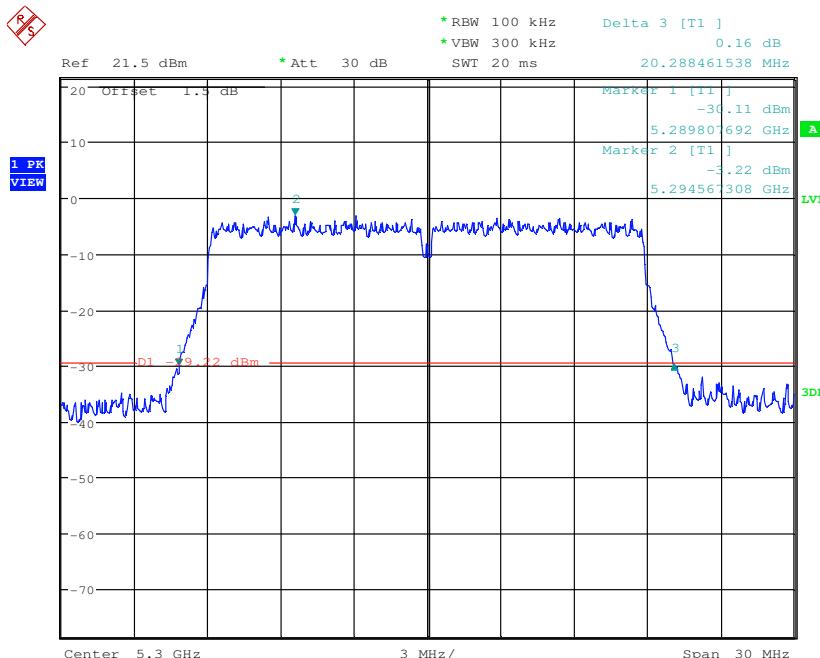
Test mode:	802.11n(HT20)	Frequency(MHz):	5240
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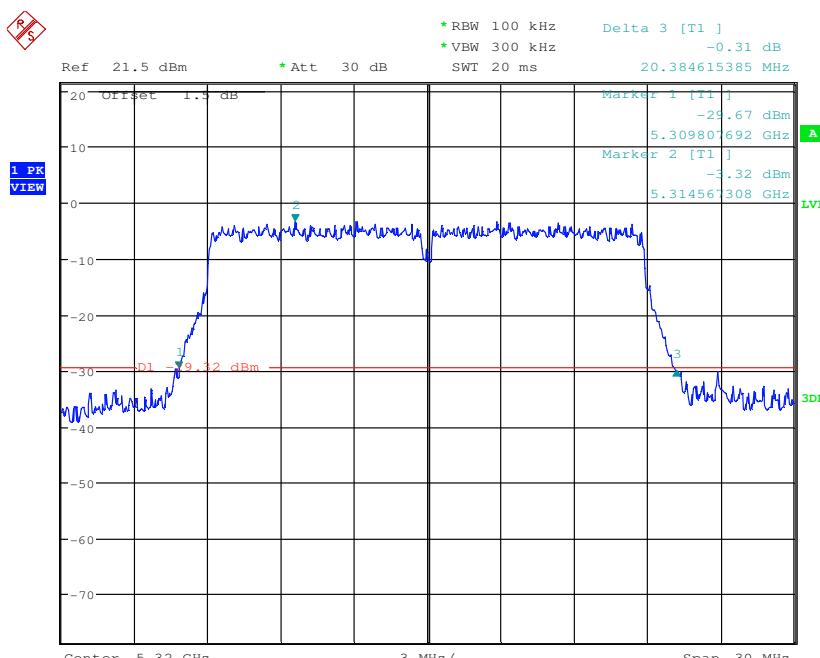
Test mode:	802.11n(HT20)	Frequency(MHz):	5260
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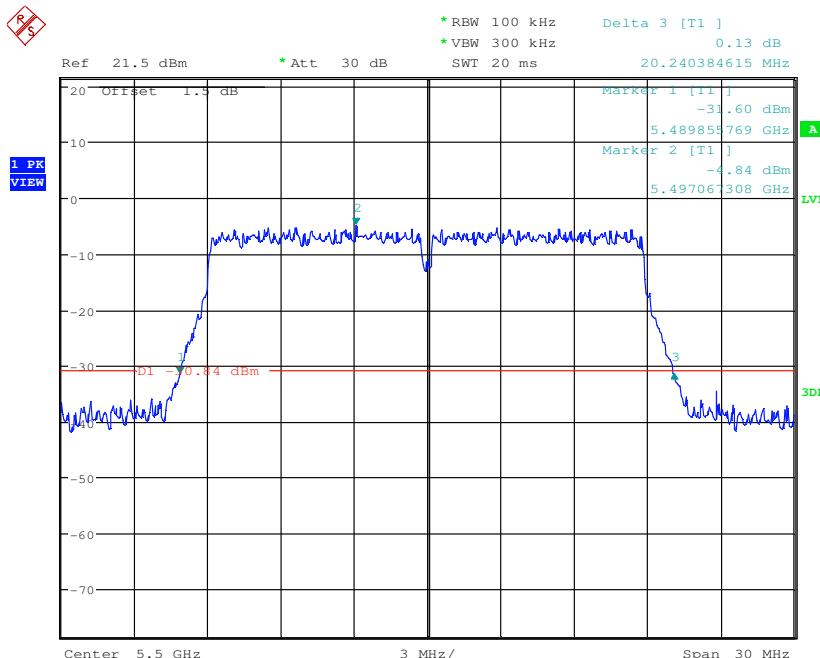
Test mode:	802.11n(HT20)	Frequency(MHz):	5300
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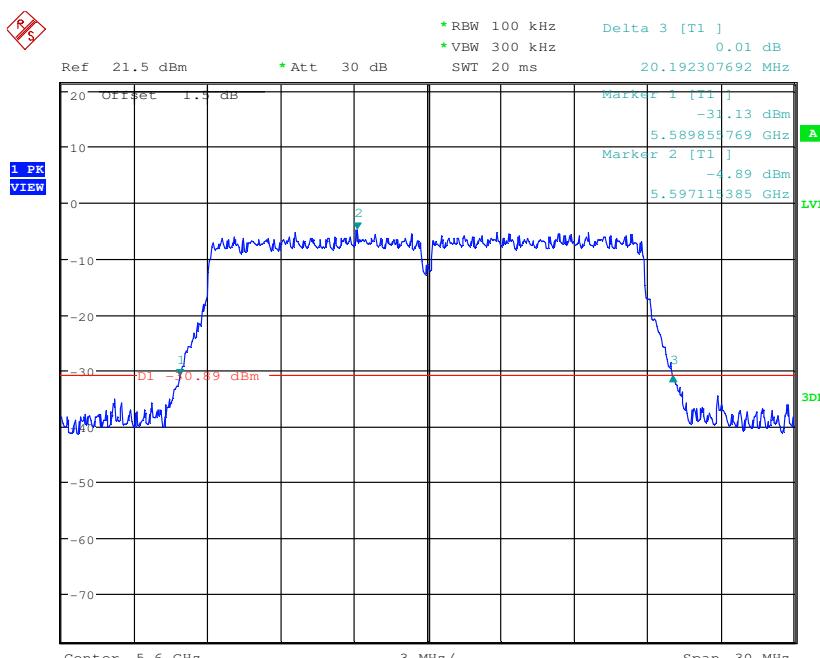
Test mode:	802.11n(HT20)	Frequency(MHz):	5320
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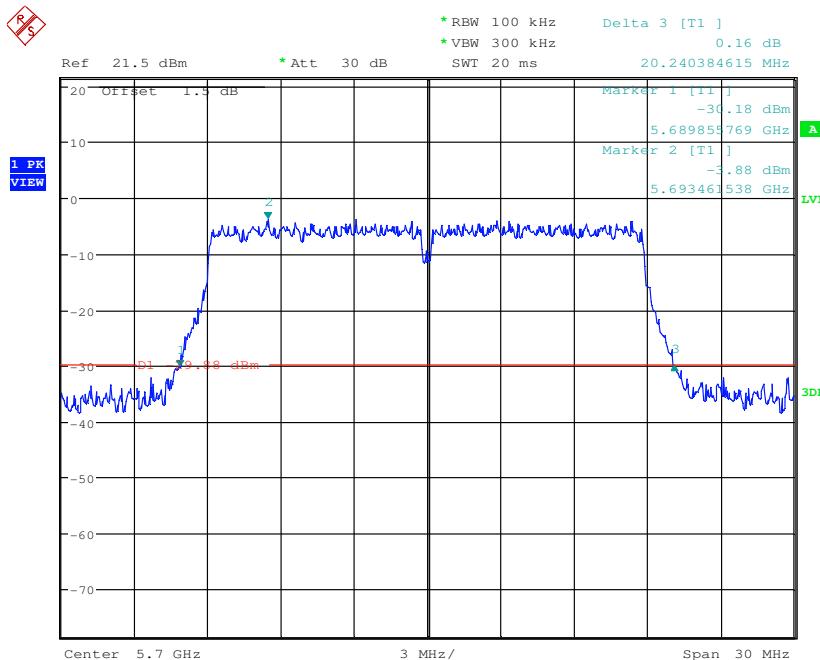
Test mode:	802.11n(HT20)	Frequency(MHz):	5500
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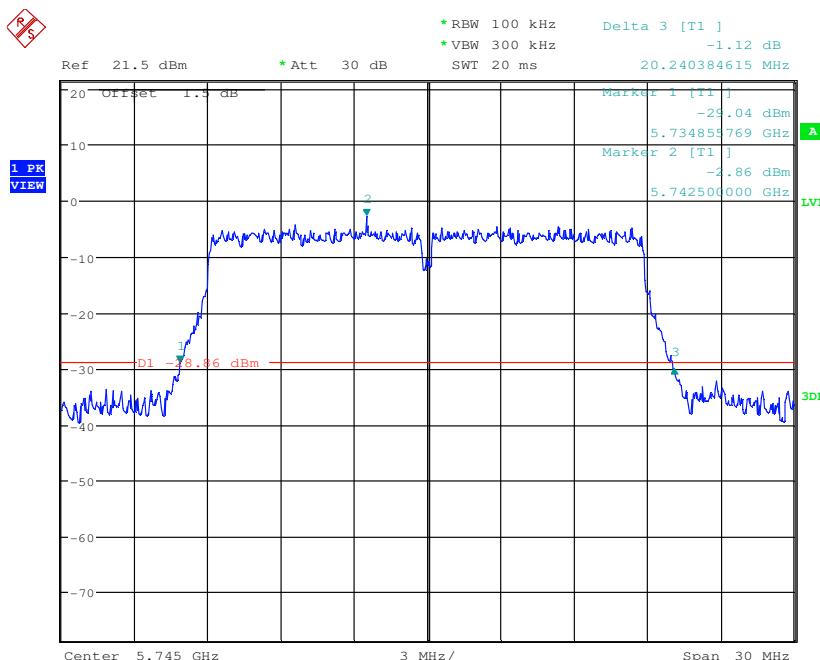
Test mode:	802.11n(HT20)	Frequency(MHz):	5600
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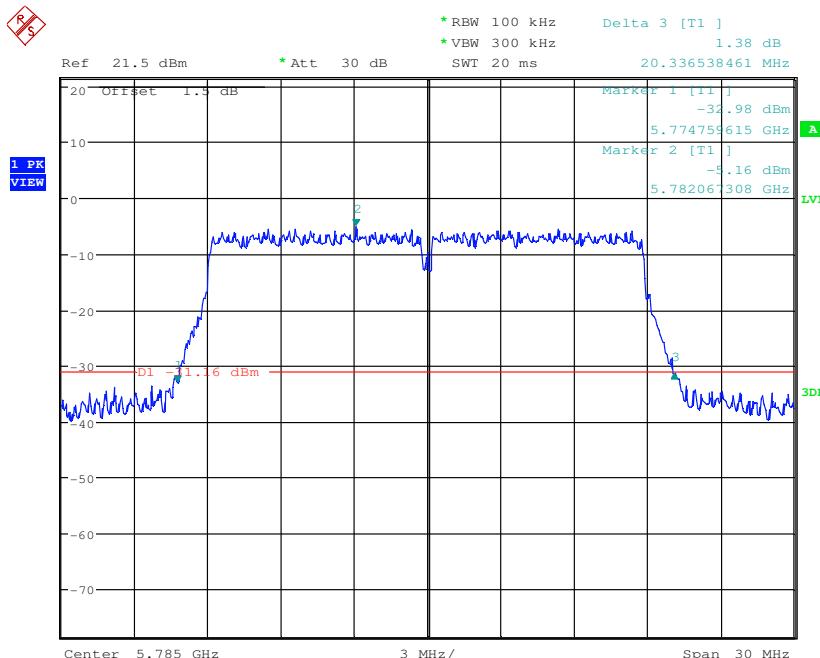
Test mode:	802.11n(HT20)	Frequency(MHz):	5700
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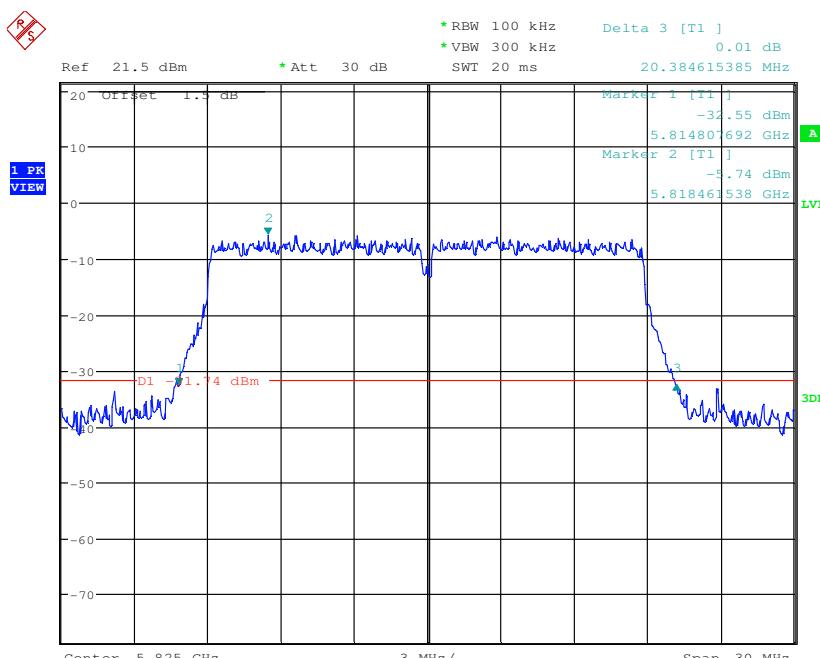
Test mode:	802.11n(HT20)	Frequency(MHz):	5745
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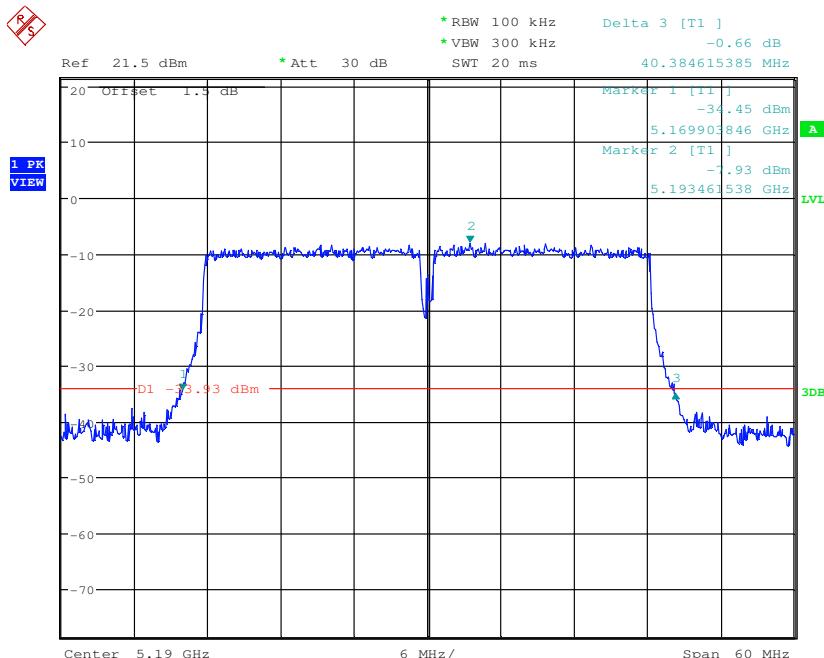
Test mode:	802.11n(HT20)	Frequency(MHz):	5785
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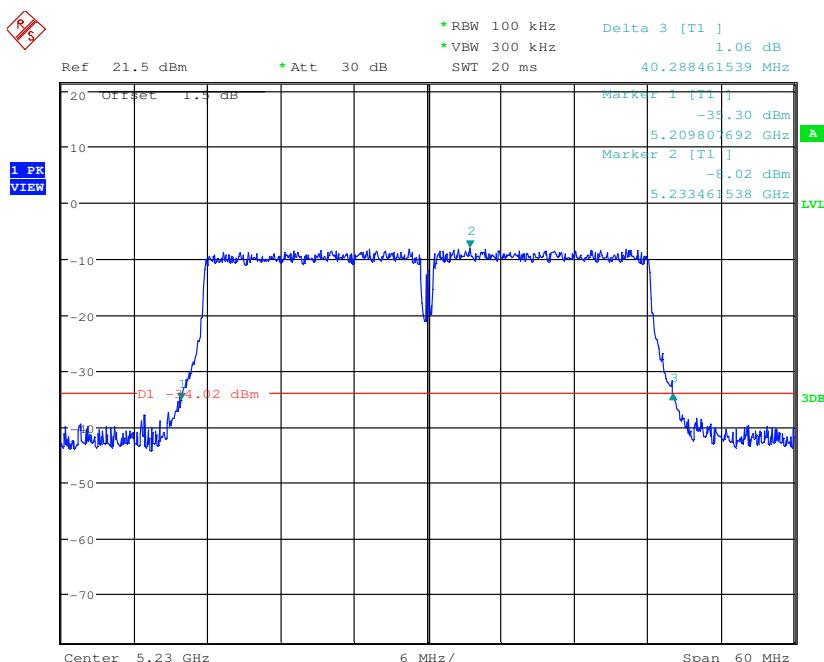
Test mode:	802.11n(HT20)	Frequency(MHz):	5825
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Test mode:	802.11n(HT40)	Frequency(MHz):	5190
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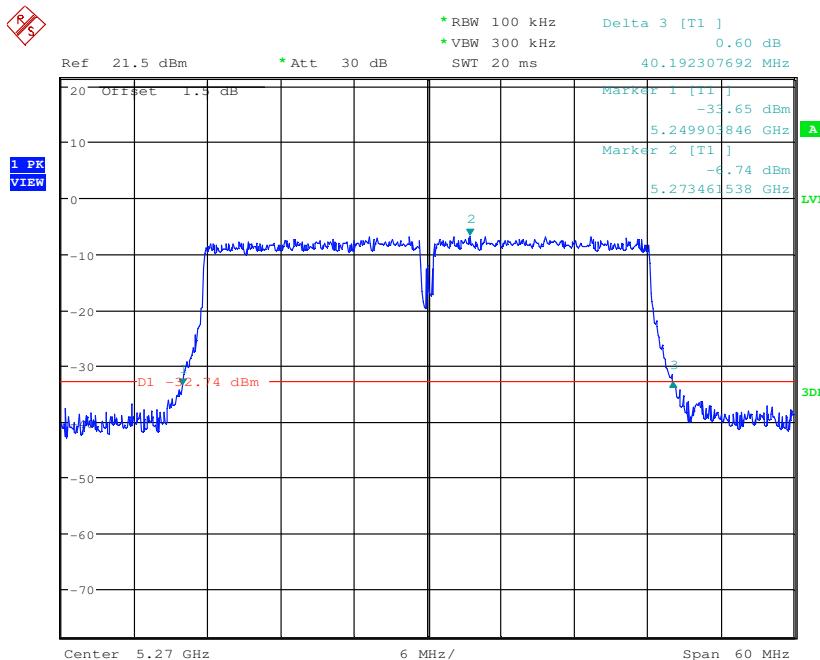


Test mode:	802.11n(HT40)	Frequency(MHz):	5230
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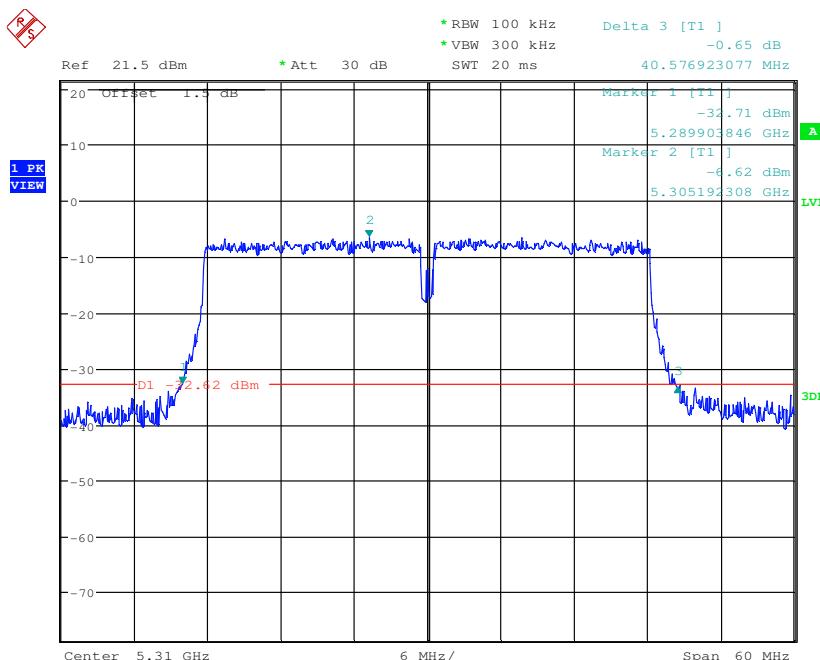


Report No.: SZEM150700437303
Page: 70 of 193

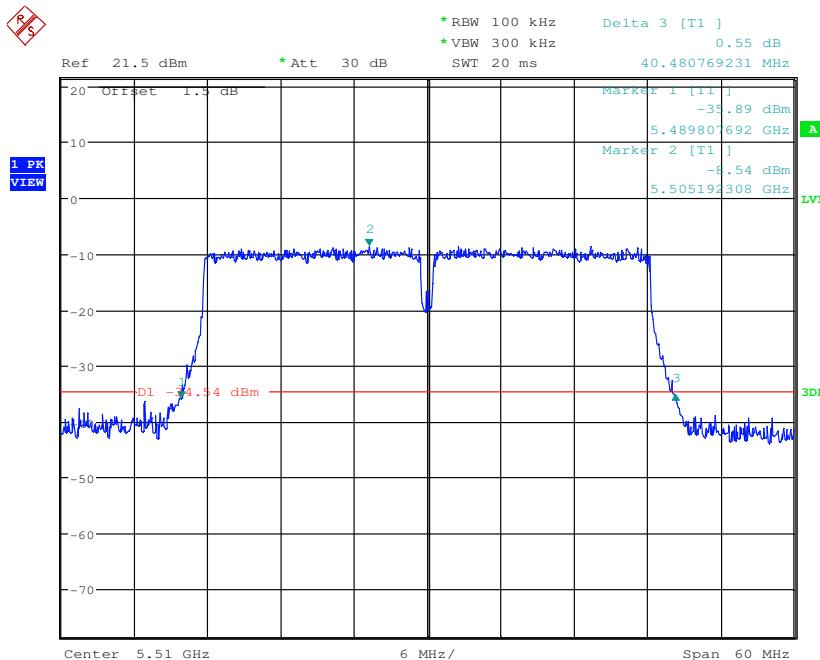
Test mode:	802.11n(HT40)	Frequency(MHz):	5270
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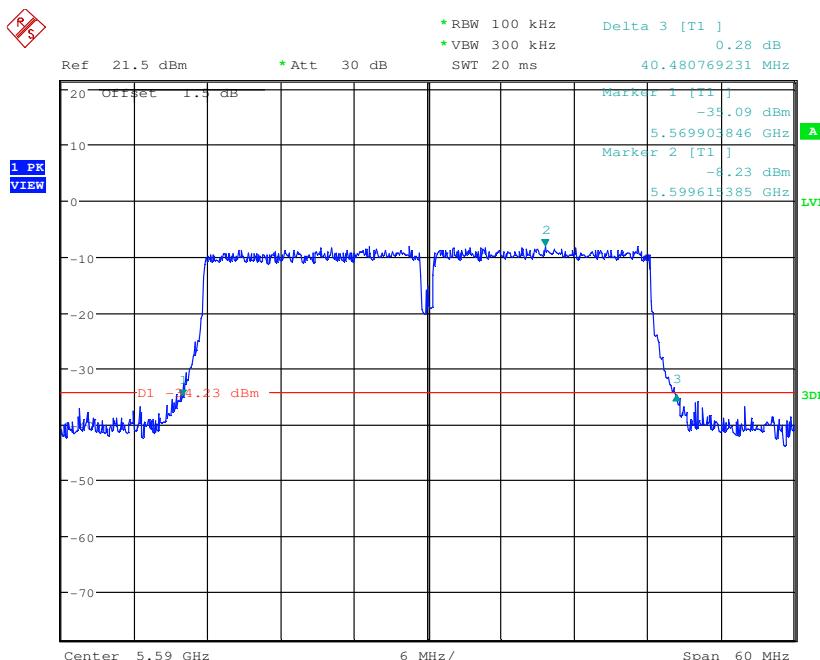
Test mode:	802.11n(HT40)	Frequency(MHz):	5310
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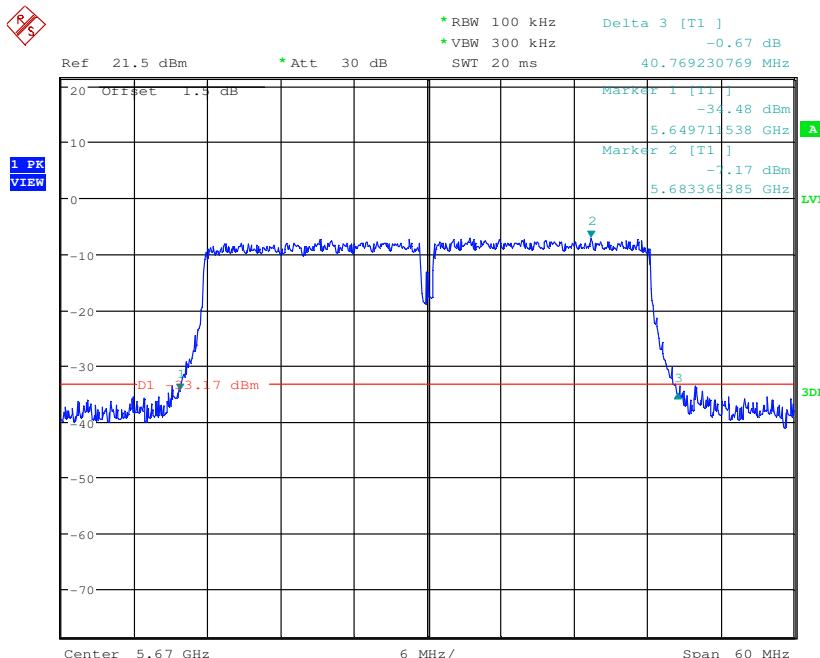
Test mode:	802.11n(HT40)	Frequency(MHz):	5510
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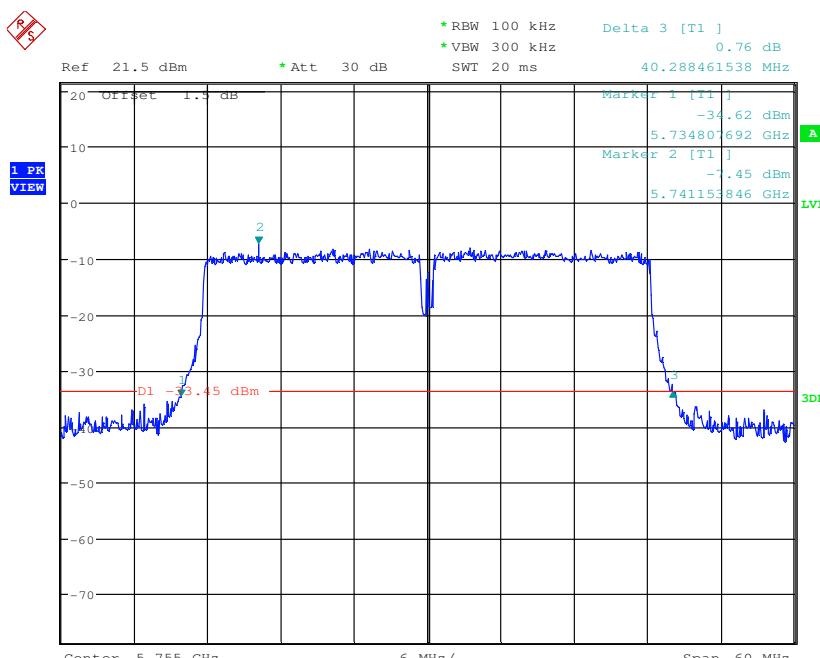
Test mode:	802.11n(HT40)	Frequency(MHz):	5590
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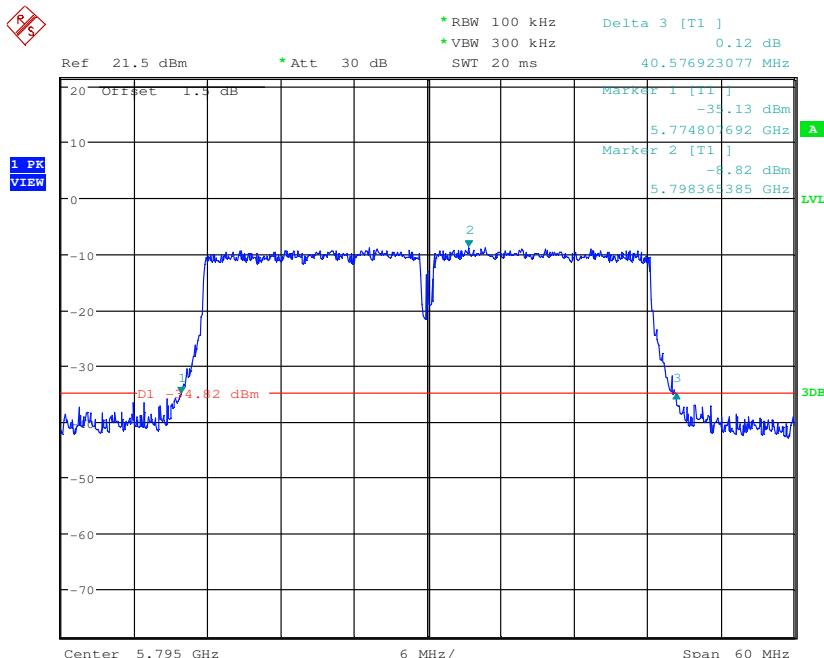
Test mode:	802.11n(HT40)	Frequency(MHz):	5670
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Test mode:	802.11n(HT40)	Frequency(MHz):	5755
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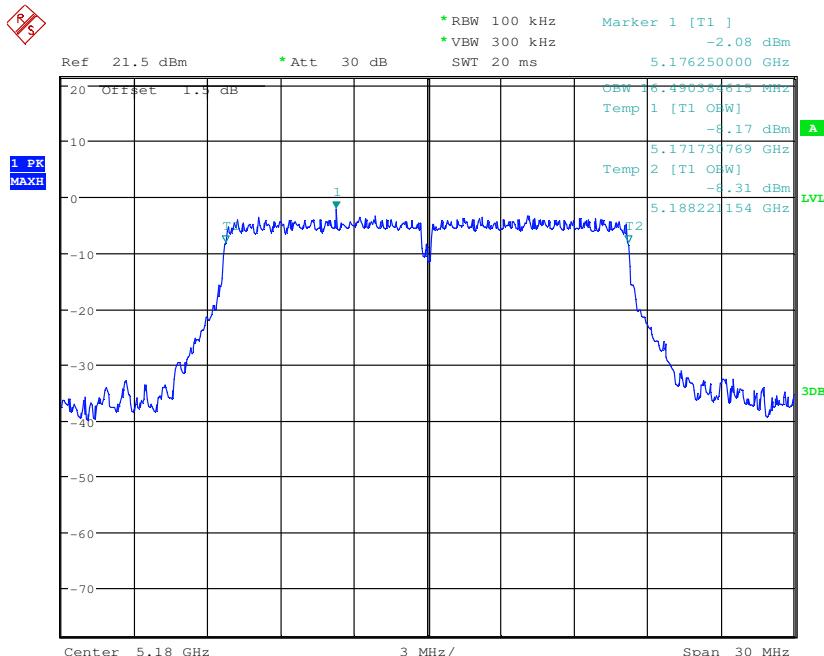


Test mode:	802.11n(HT40)	Frequency(MHz):	5795
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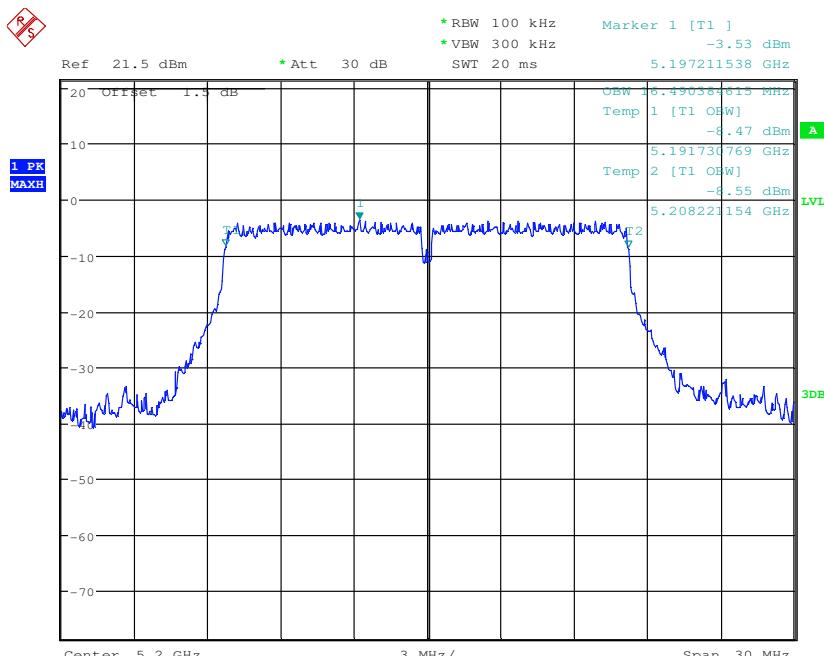


99% occupied bandwidth
Test plot as follows:

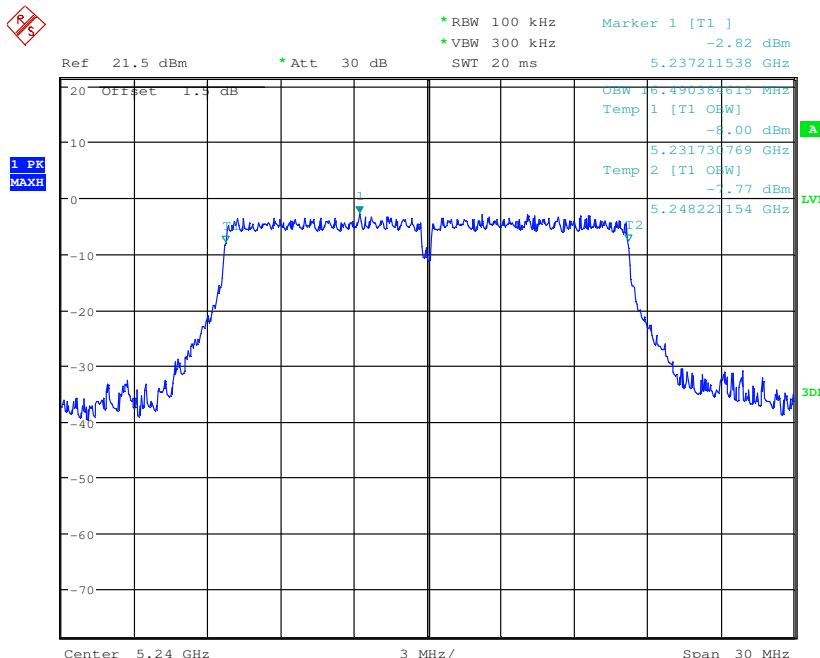
Test mode:	802.11a	Frequency(MHz):	5180
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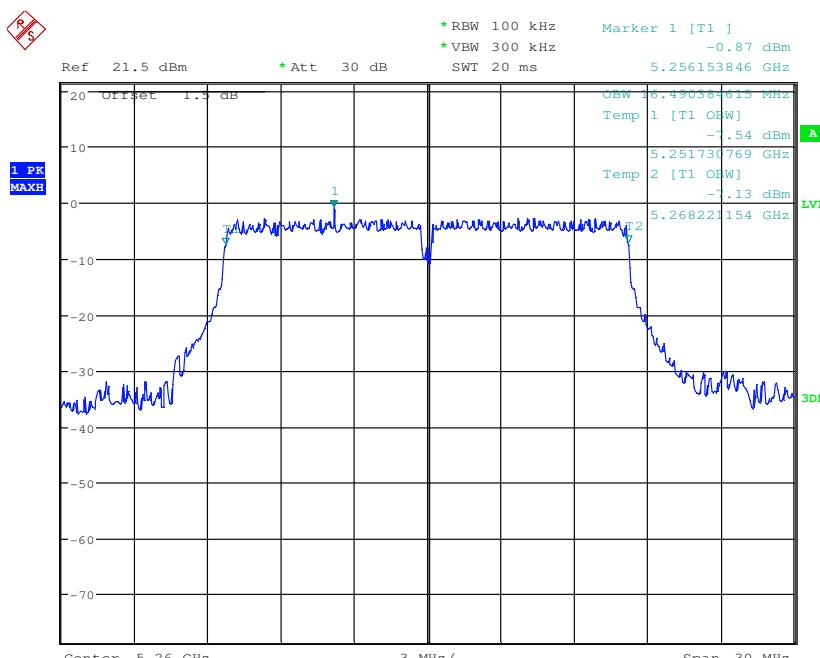
Test mode:	802.11a	Frequency(MHz):	5200
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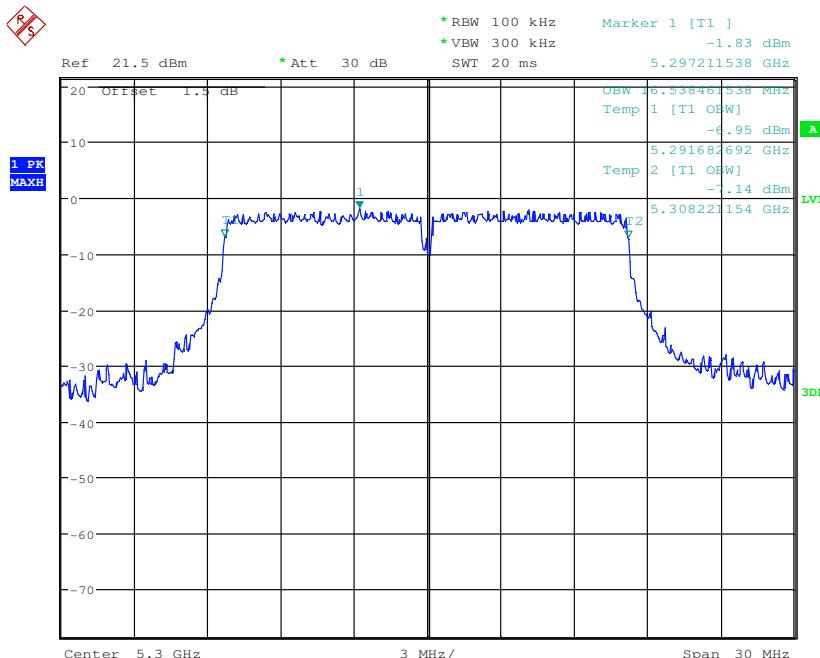
Test mode:	802.11a	Frequency(MHz):	5240
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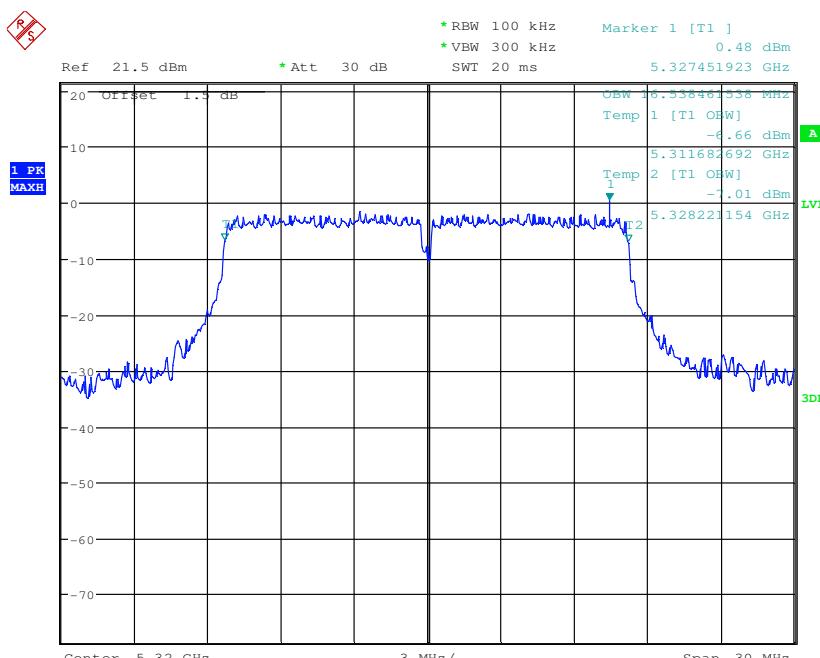
Test mode:	802.11a	Frequency(MHz):	5260
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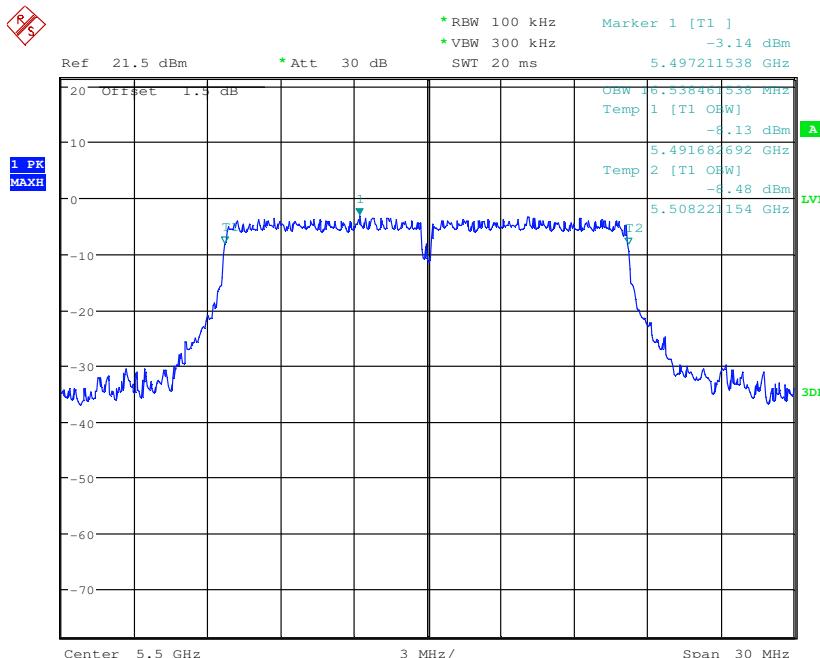
Test mode:	802.11a	Frequency(MHz):	5300
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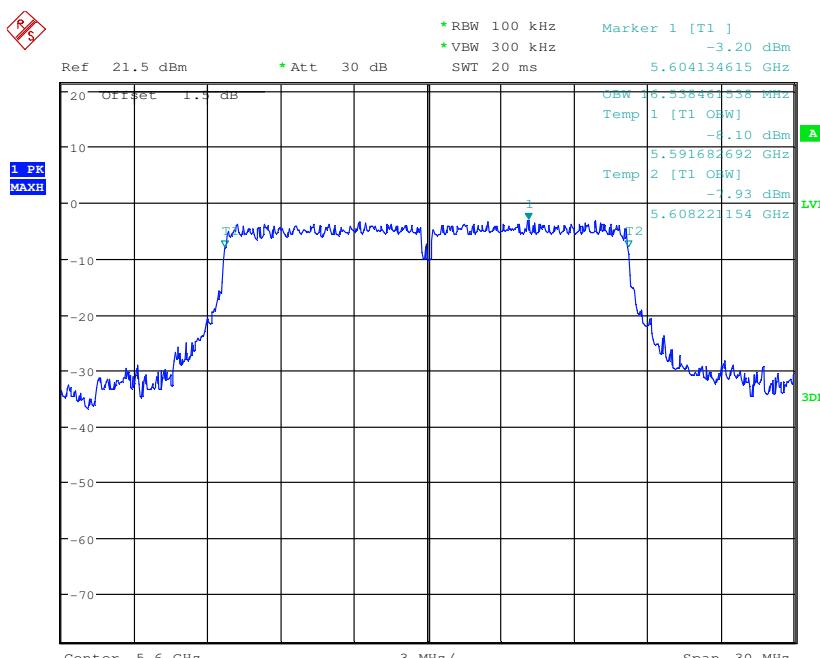
Test mode:	802.11a	Frequency(MHz):	5320
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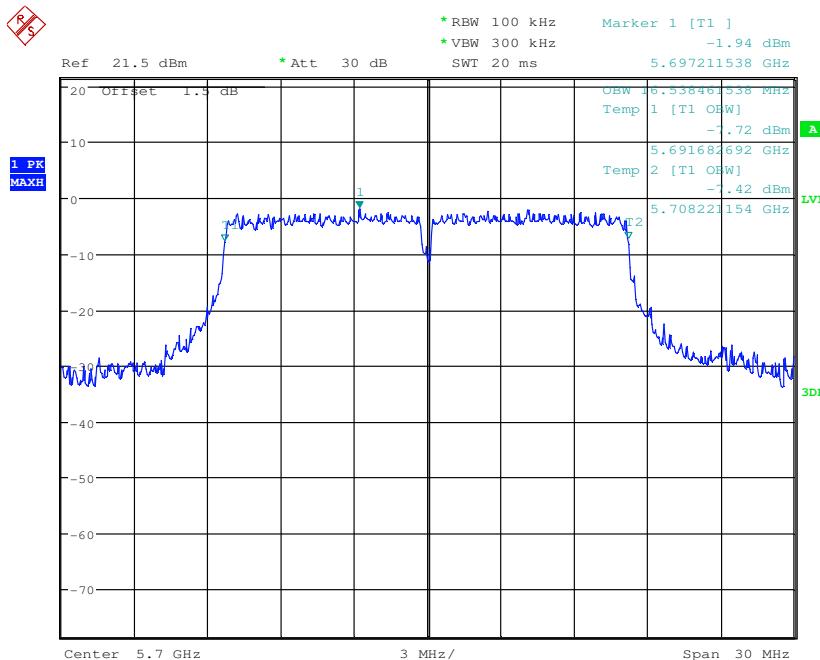
Test mode:	802.11a	Frequency(MHz):	5500
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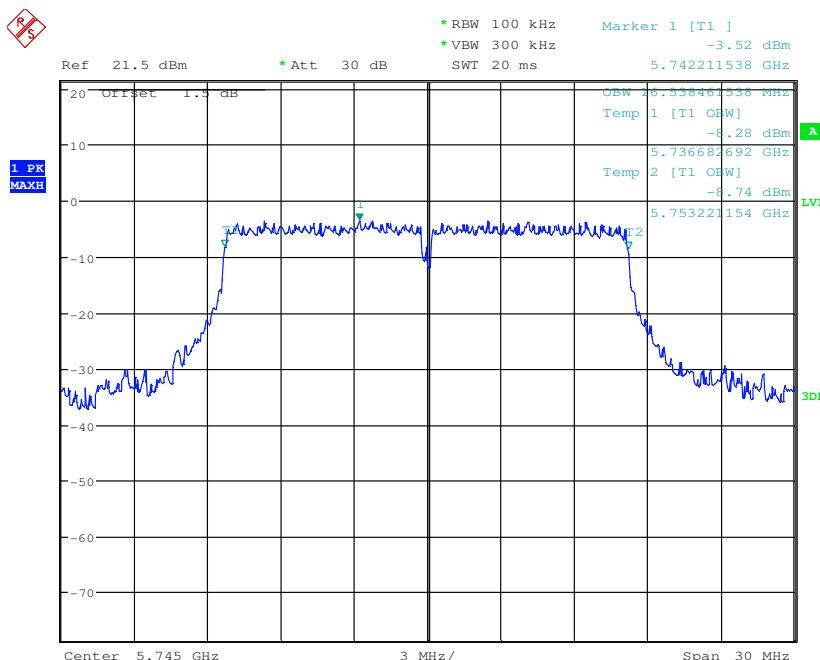
Test mode:	802.11a	Frequency(MHz):	5600
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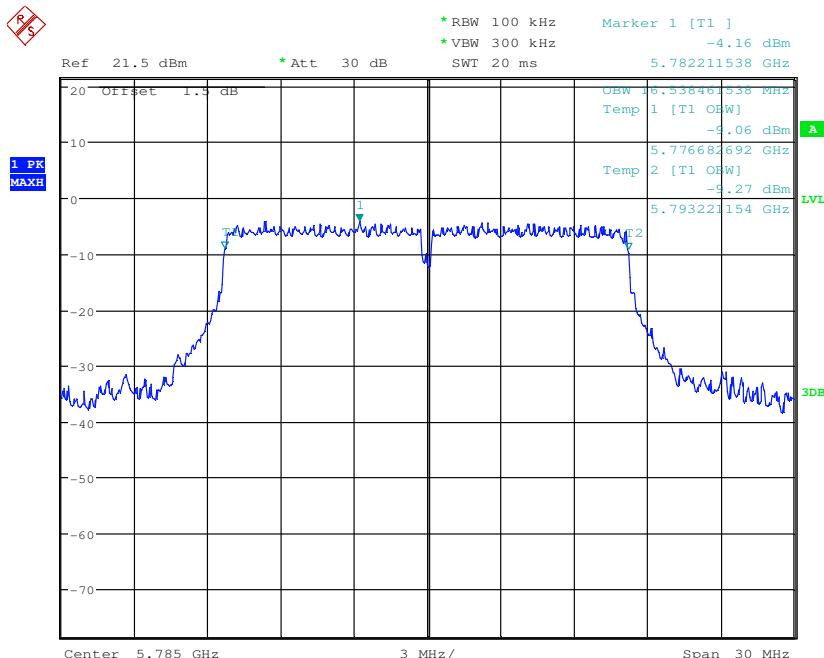
Test mode:	802.11a	Frequency(MHz):	5700
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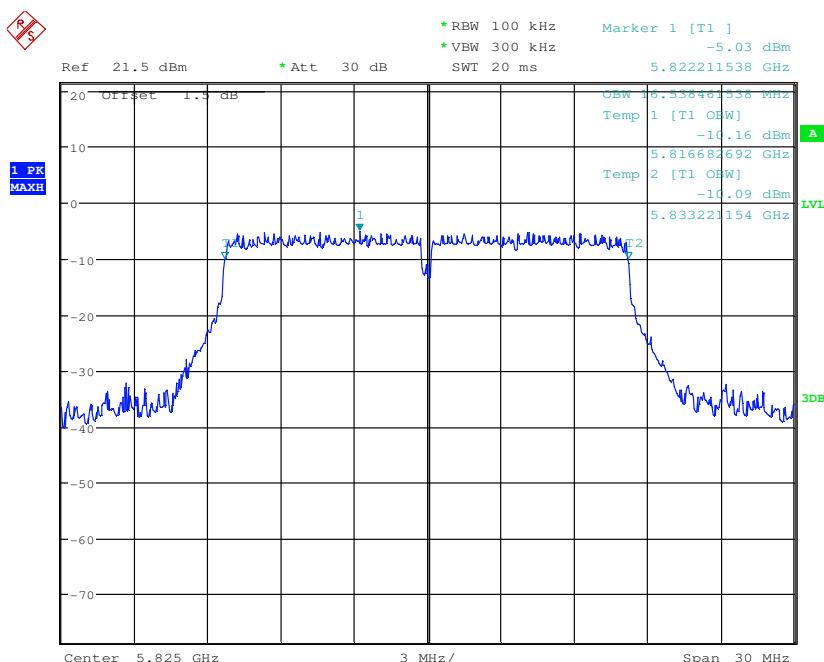
Test mode:	802.11a	Frequency(MHz):	5745
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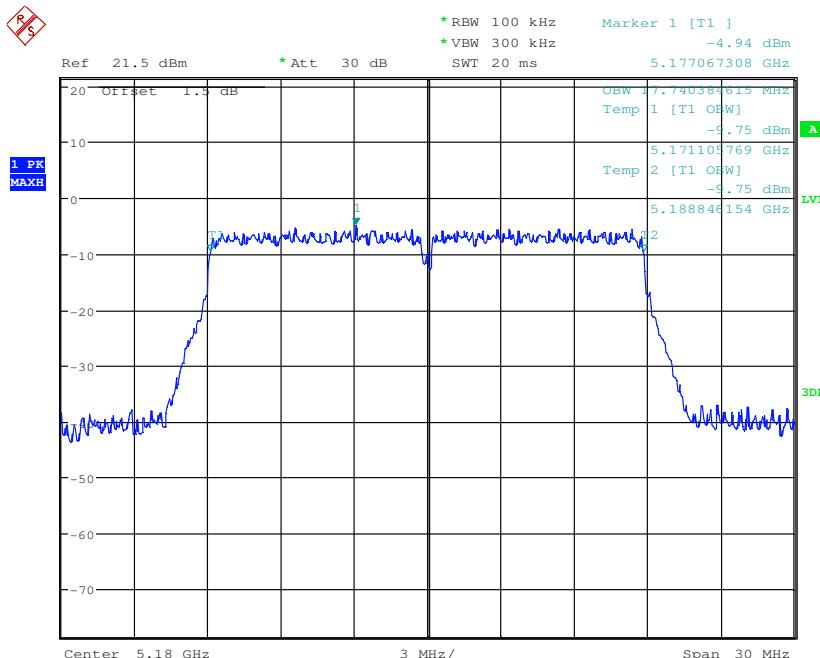
Test mode:	802.11a	Frequency(MHz):	5785
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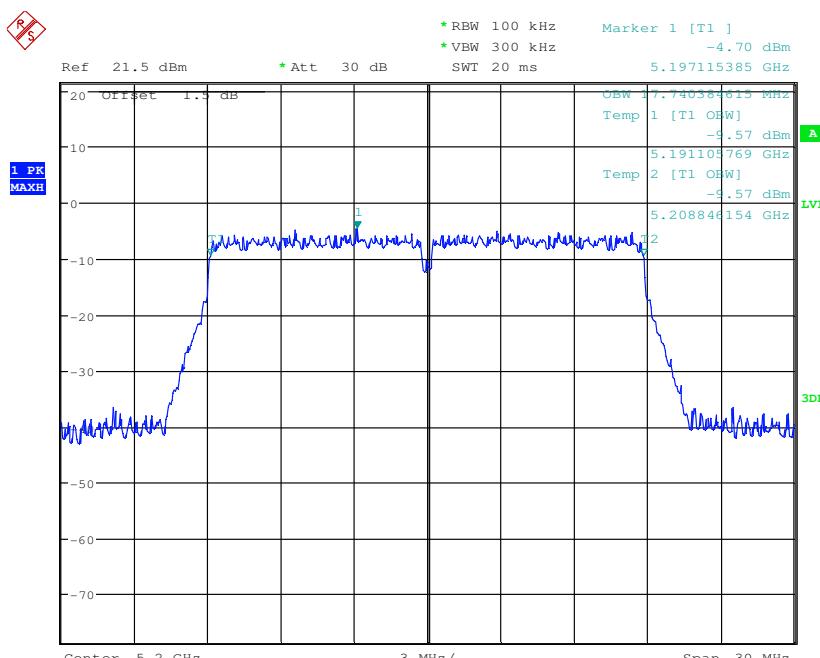
Test mode:	802.11a	Frequency(MHz):	5825
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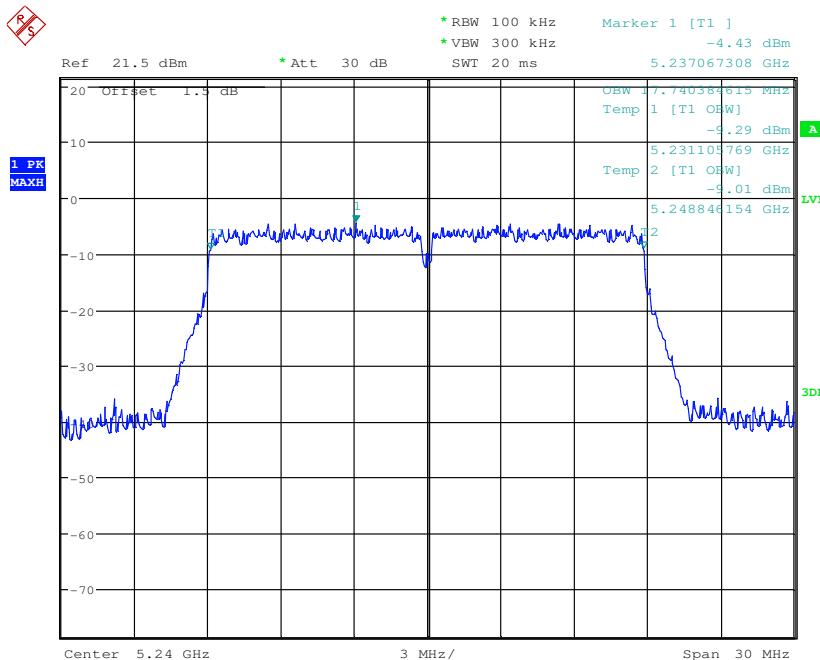
Test mode:	802.11n(HT20)	Frequency(MHz):	5180
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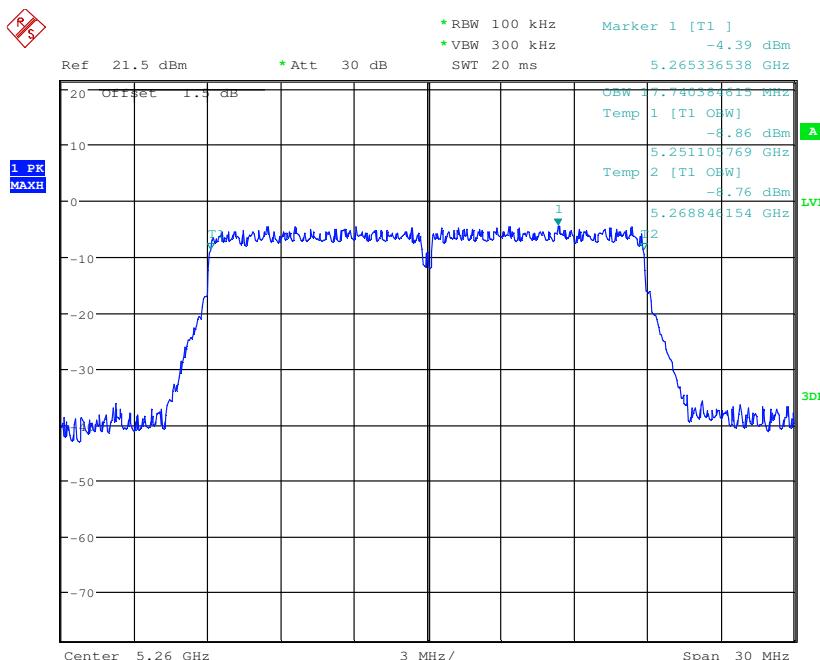
Test mode:	802.11n(HT20)	Frequency(MHz):	5200
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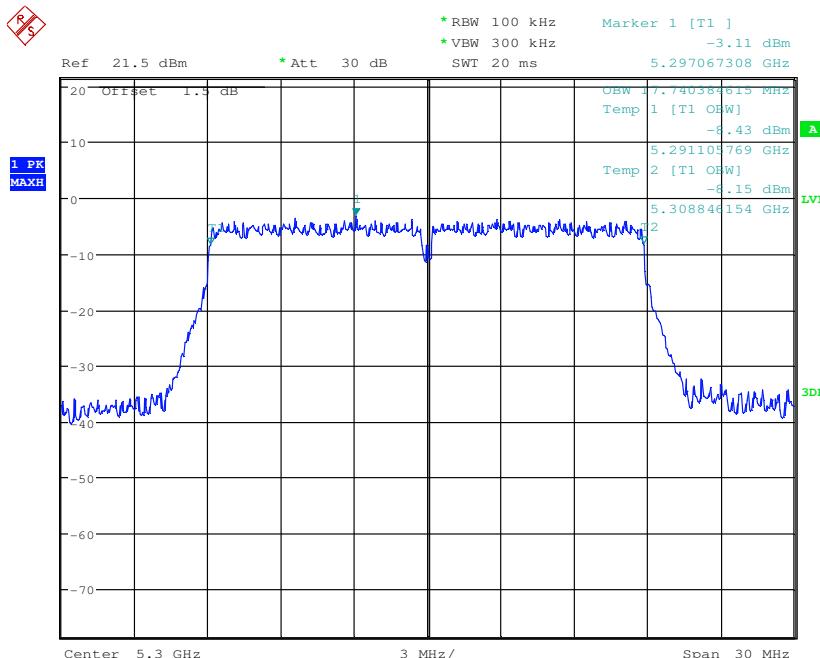
Test mode:	802.11n(HT20)	Frequency(MHz):	5240
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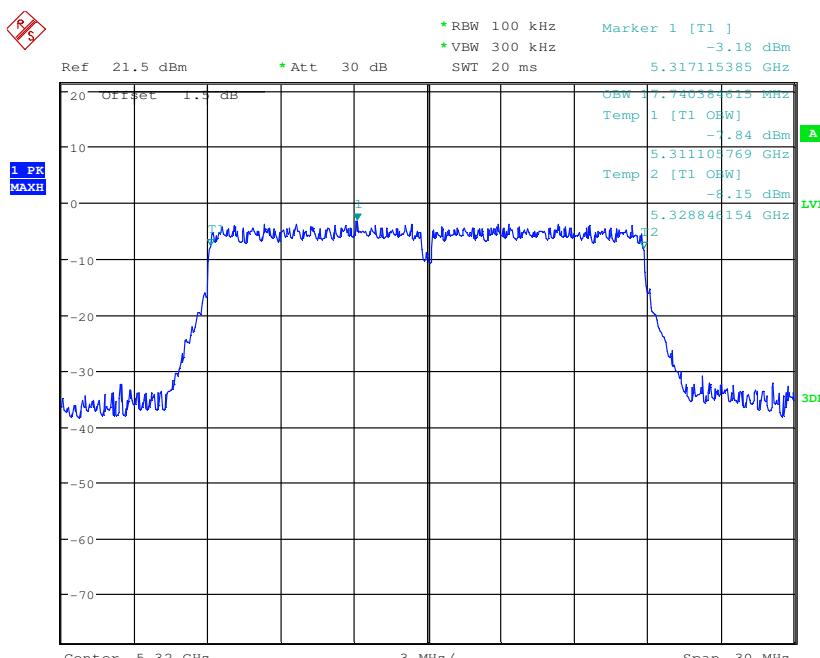
Test mode:	802.11n(HT20)	Frequency(MHz):	5260
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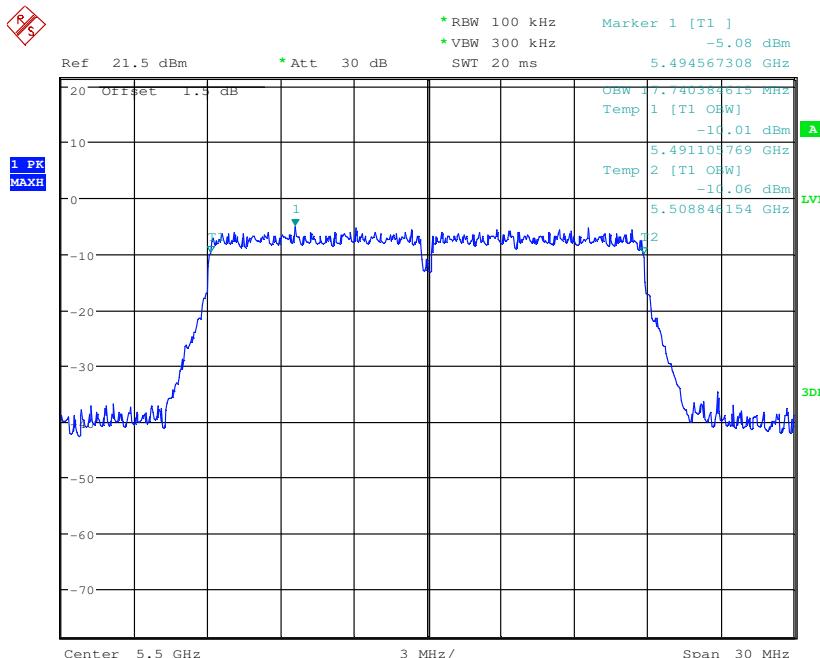
Test mode:	802.11n(HT20)	Frequency(MHz):	5300
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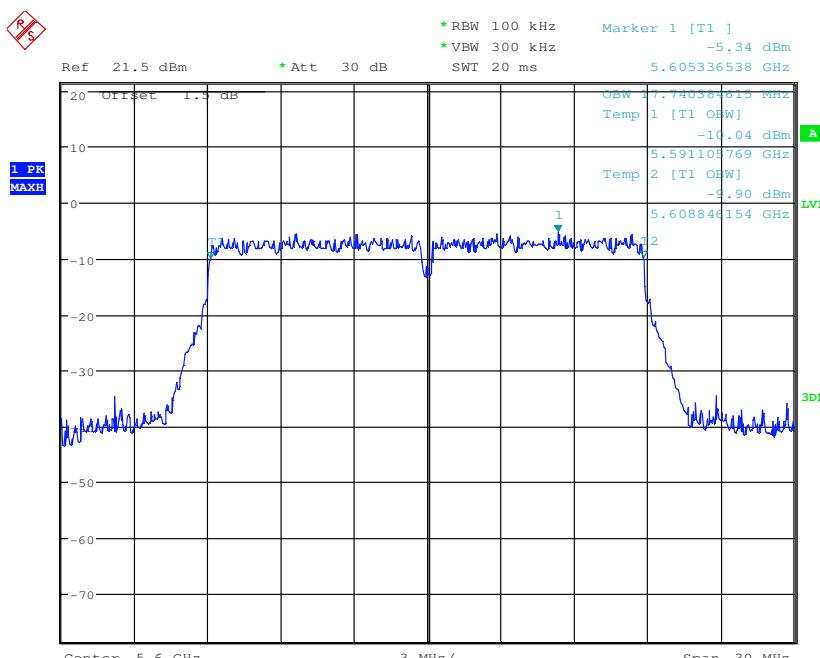
Test mode:	802.11n(HT20)	Frequency(MHz):	5320
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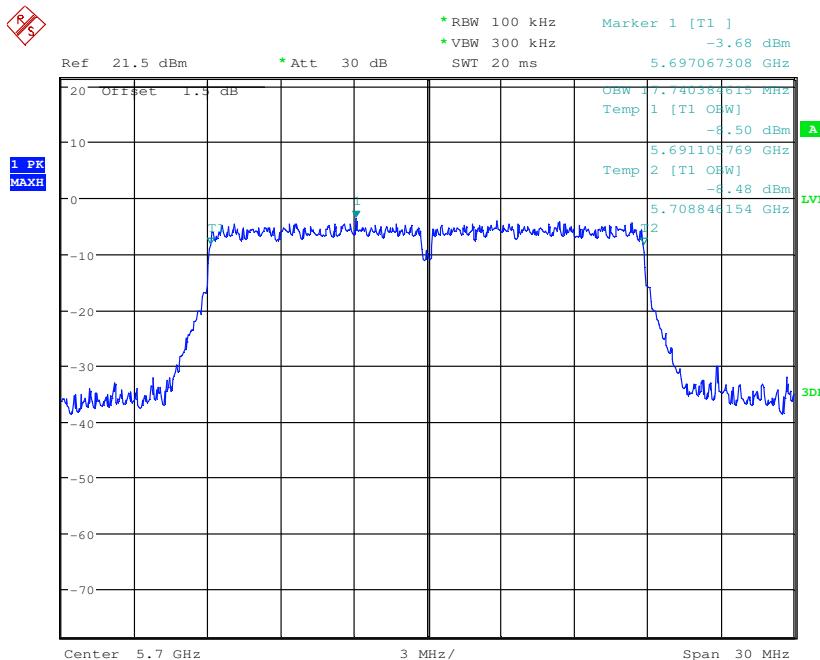
Test mode:	802.11n(HT20)	Frequency(MHz):	5500
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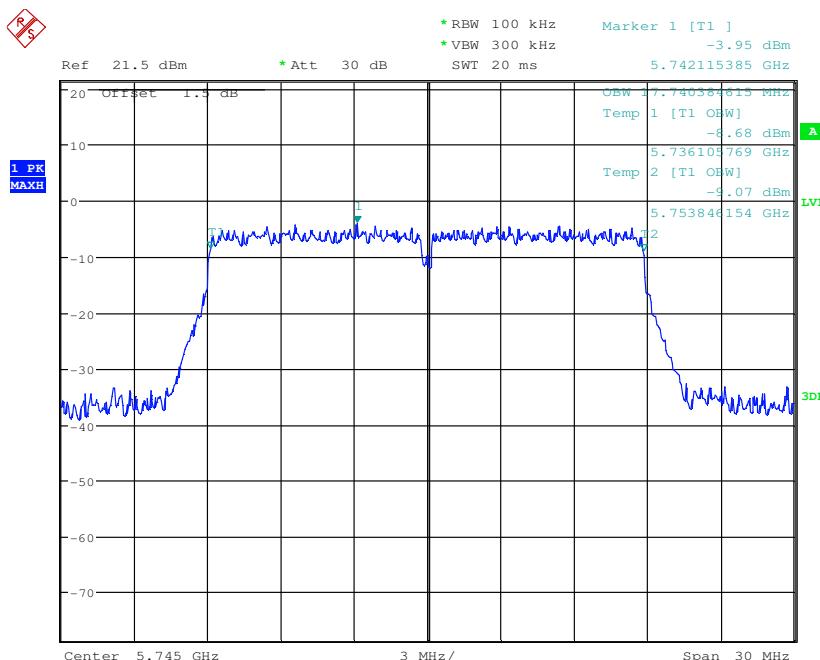
Test mode:	802.11n(HT20)	Frequency(MHz):	5600
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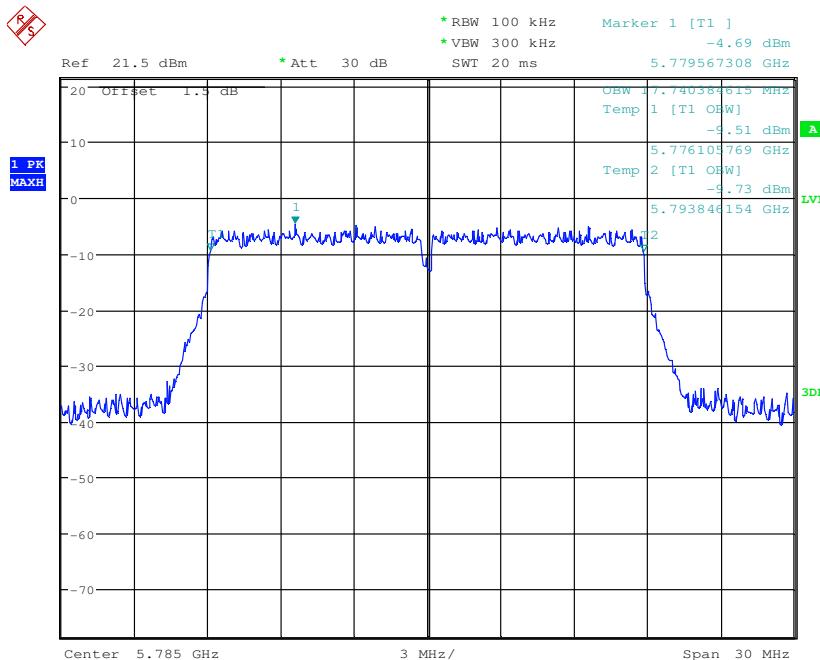
Test mode:	802.11n(HT20)	Frequency(MHz):	5700
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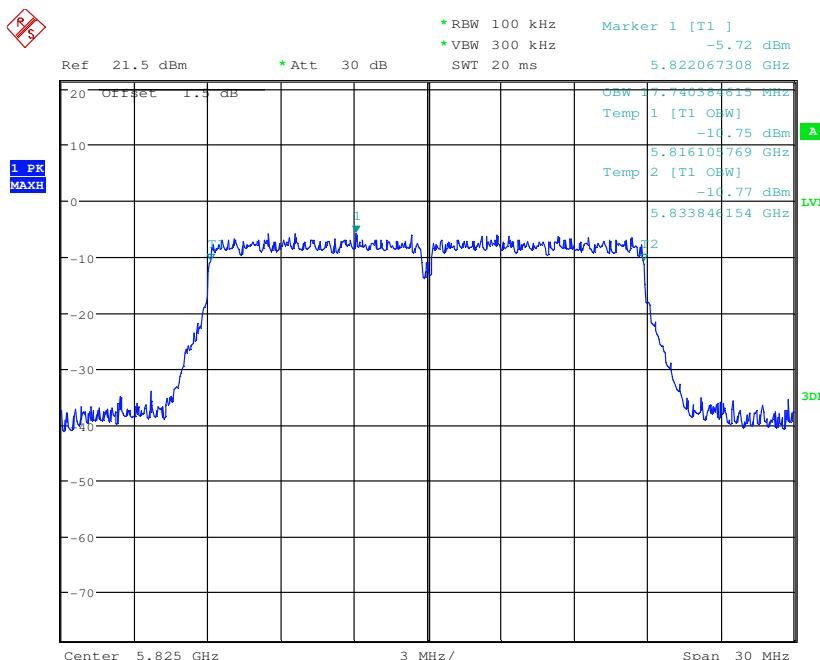
Test mode:	802.11n(HT20)	Frequency(MHz):	5745
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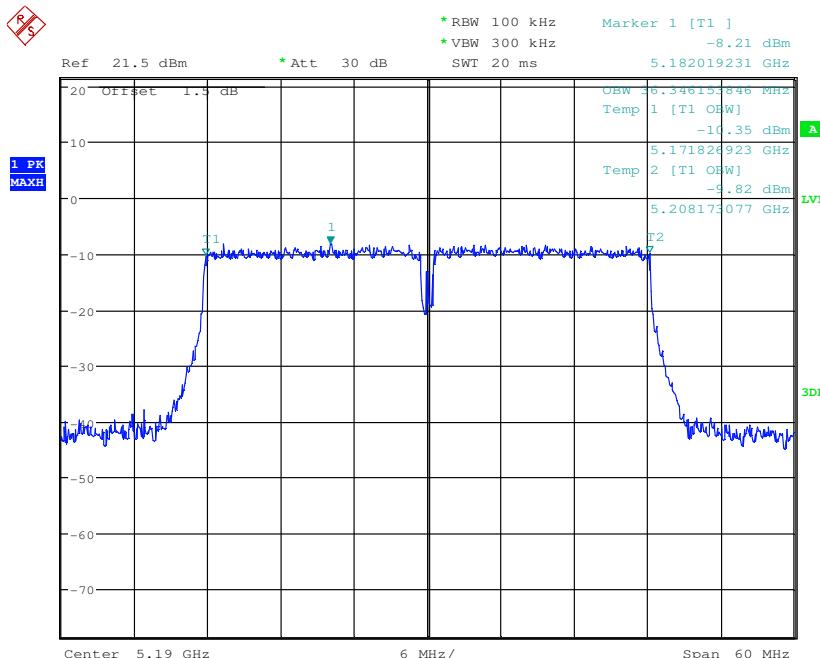
Test mode:	802.11n(HT20)	Frequency(MHz):	5785
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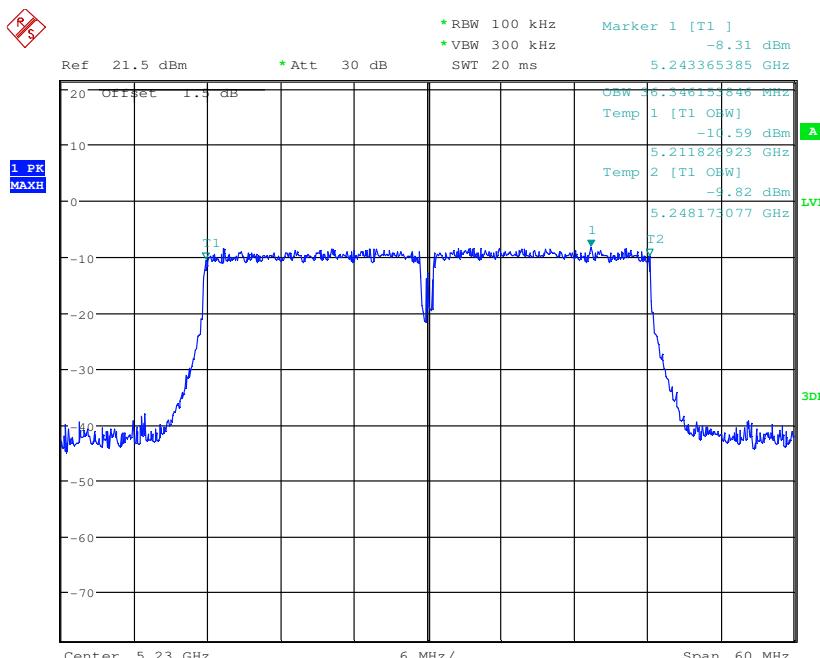
Test mode:	802.11n(HT20)	Frequency(MHz):	5825
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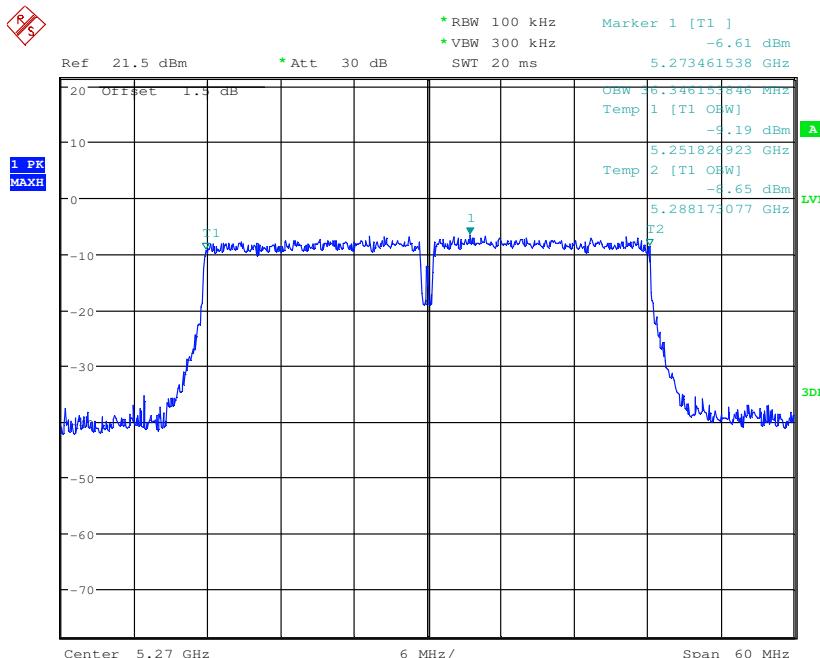
Test mode:	802.11n(HT40)	Frequency(MHz):	5190
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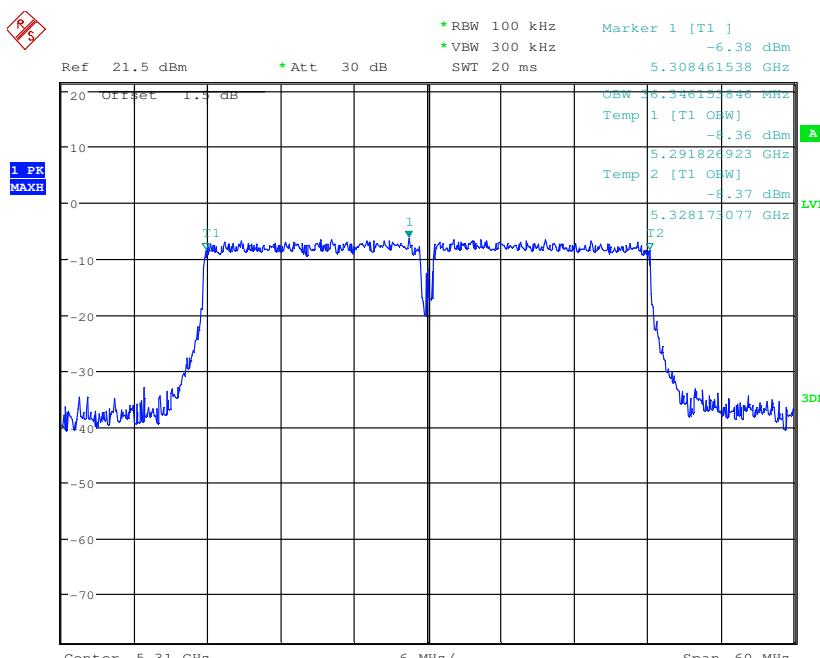
Test mode:	802.11n(HT40)	Frequency(MHz):	5230
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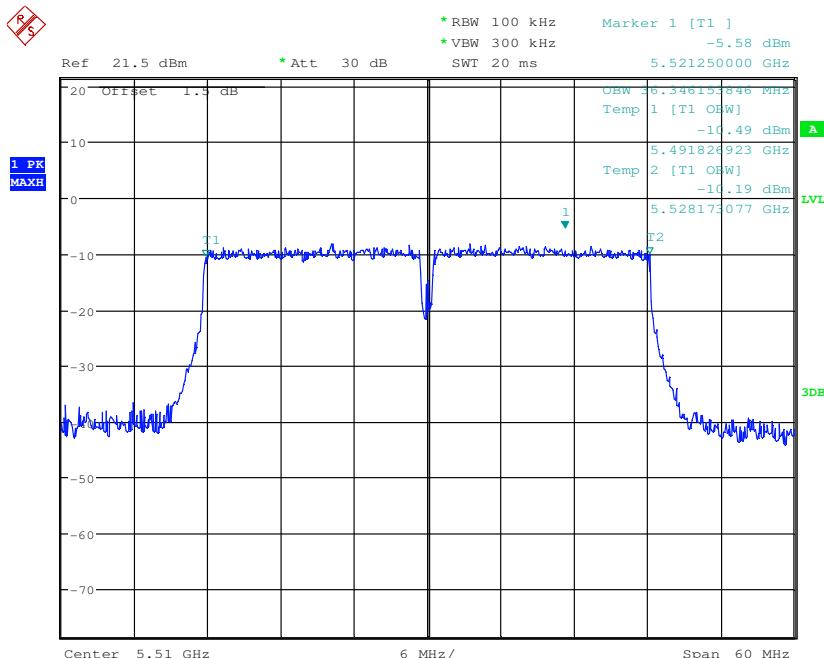
Test mode:	802.11n(HT40)	Frequency(MHz):	5270
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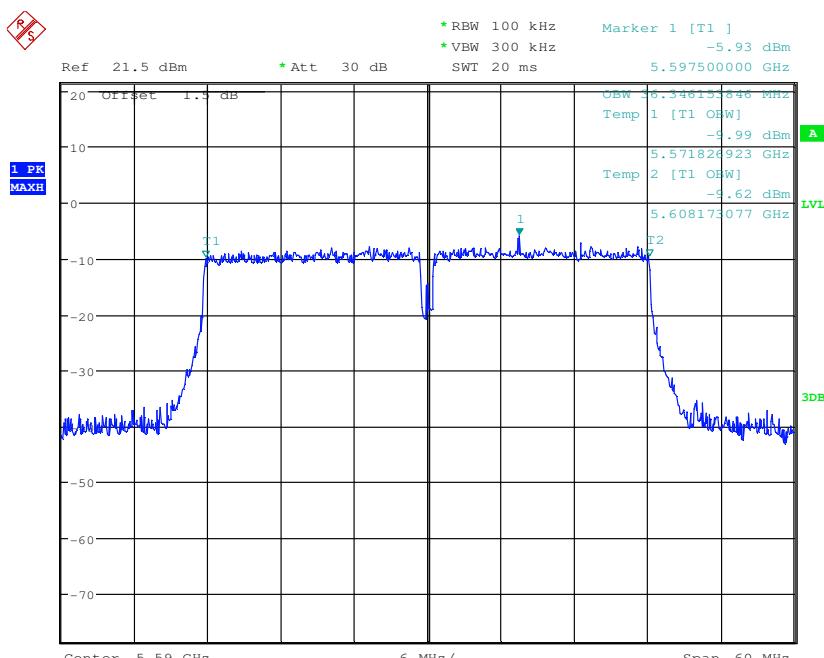
Test mode:	802.11n(HT40)	Frequency(MHz):	5310
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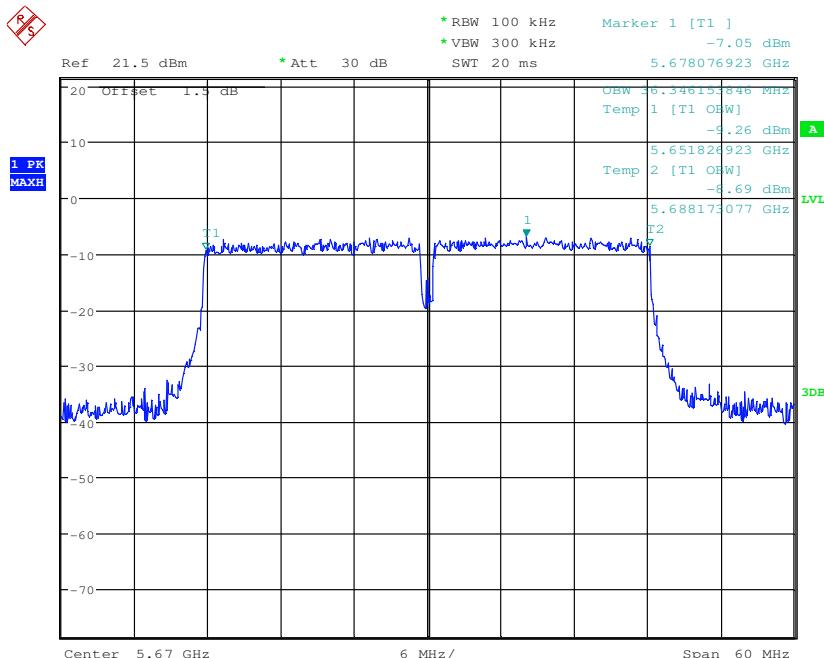
Test mode:	802.11n(HT40)	Frequency(MHz):	5510
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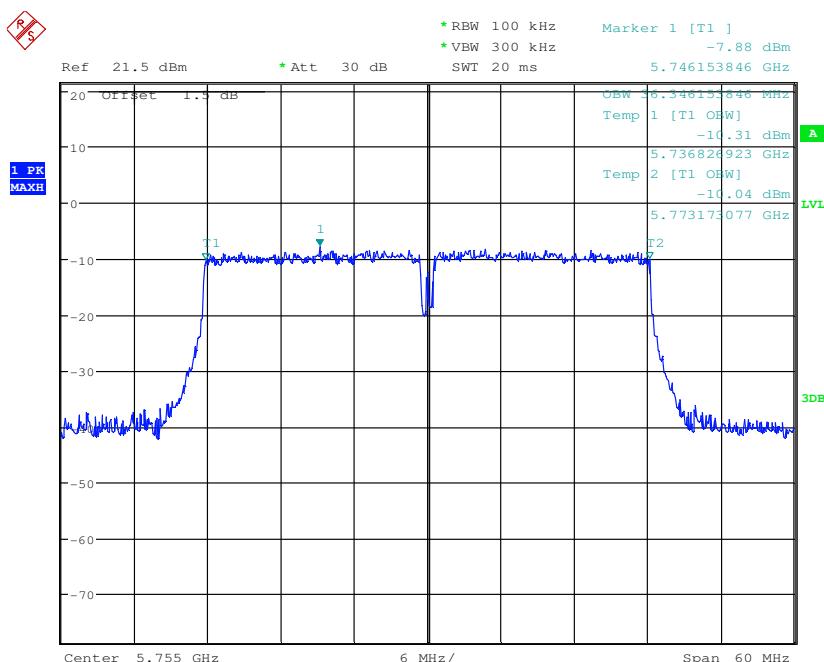
Test mode:	802.11n(HT40)	Frequency(MHz):	5590
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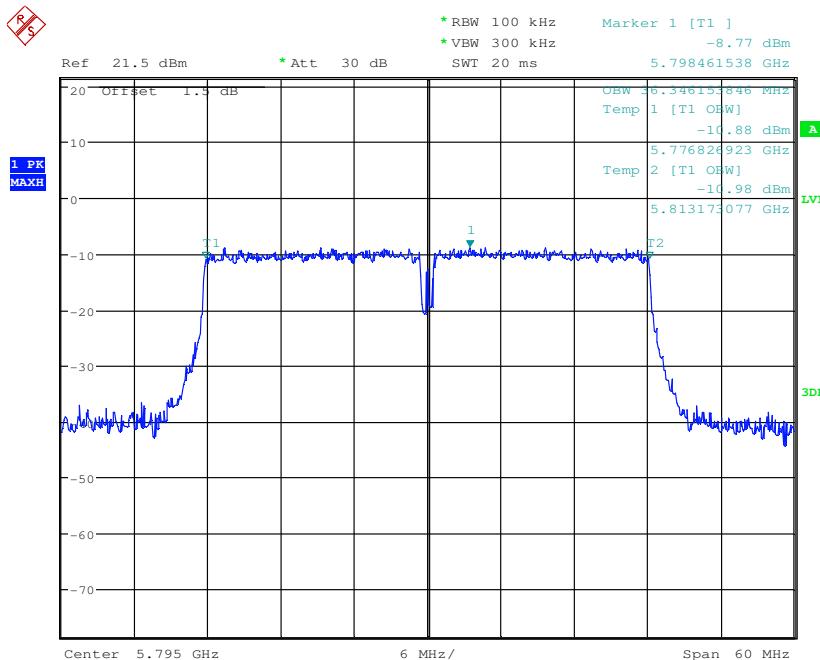
Test mode:	802.11n(HT40)	Frequency(MHz):	5670
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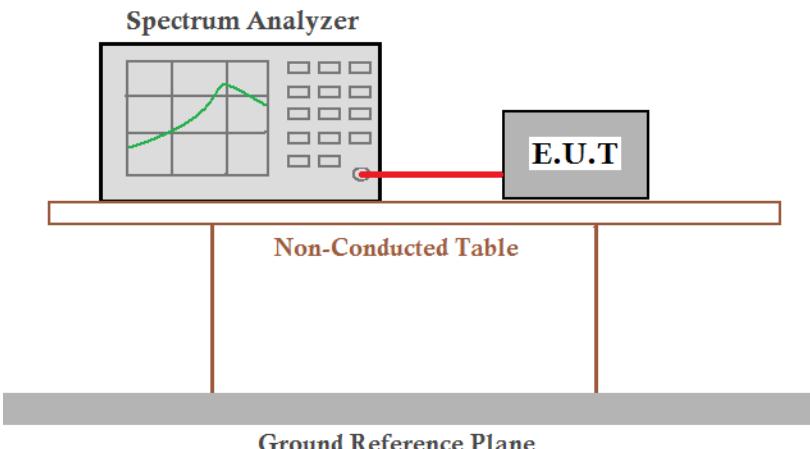
Test mode:	802.11n(HT40)	Frequency(MHz):	5755
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Test mode:	802.11n(HT40)	Frequency(MHz):	5795
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6.5 6dB Emission Bandwidth

Test Requirement:	47 CFR Part 15 Section 15.407(e)	
Test Method:	ANSI C63.10: 2013	
Test Setup:		
Instruments Used:	Refer to section 5.10 for details.	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.	
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40). Only the worst case is recorded in the report. Pre-scan was performed at Antenna 0 and Antenna 1, no worst case was found. Only the test data of Antenna 0 was shown in this report.	
Limit:	Frequency Band	Limit
	5725-5850MHz	At lease 500kHz
Test Results:	Pass	



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM150700437303
Page: 92 of 193

Measurement Data:

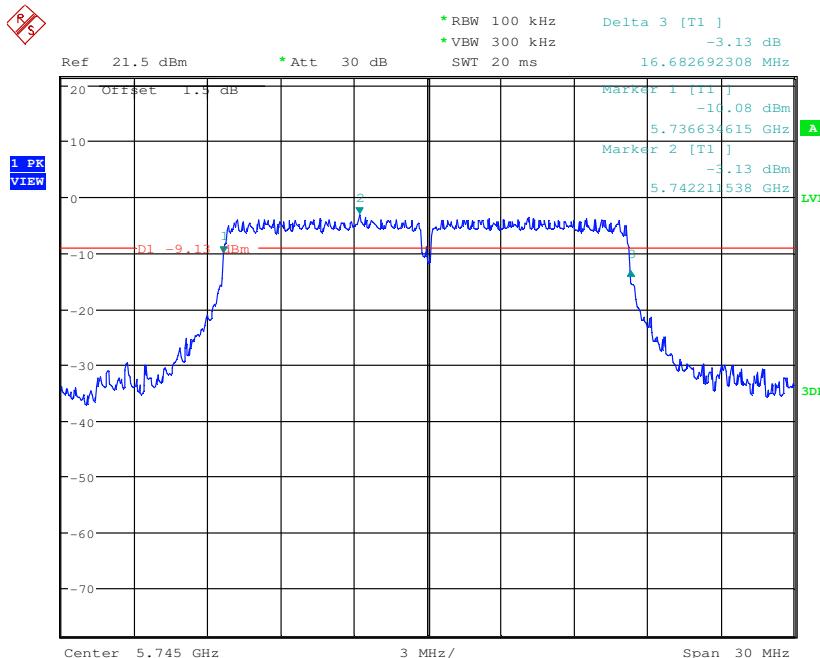
802.11a mode			
Frequency (MHz)	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result
5745	16.683	≥500	Pass
5785	16.635	≥500	Pass
5825	16.635	≥500	Pass

802.11n(HT20) mode			
Frequency (MHz)	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result
5745	17.788	≥500	Pass
5785	17.885	≥500	Pass
5825	17.933	≥500	Pass

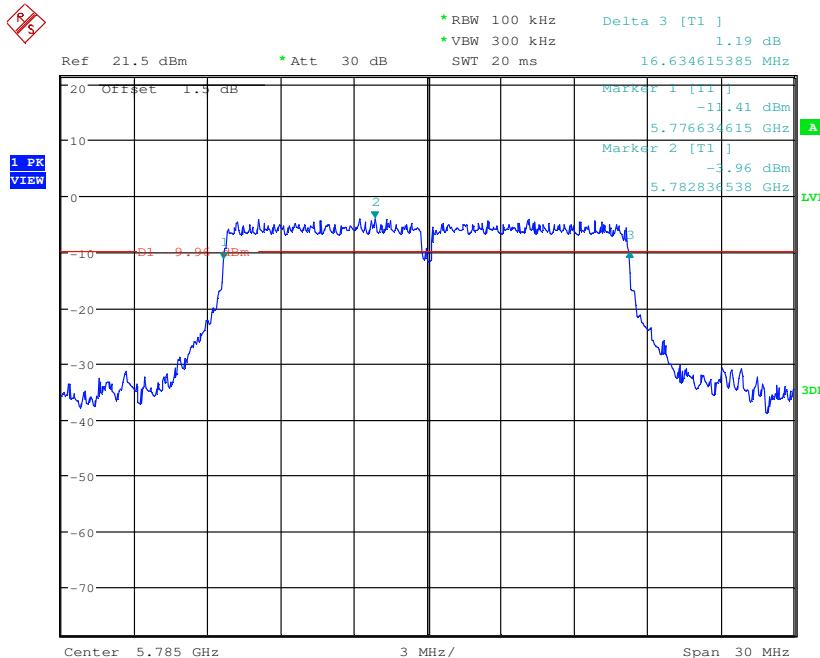
802.11n(HT40) mode			
Frequency (MHz)	6dB Occupy Bandwidth (MHz)	Limit (kHz)	Result
5755	36.731	≥500	Pass
5795	36.827	≥500	Pass

Test plot as follows:

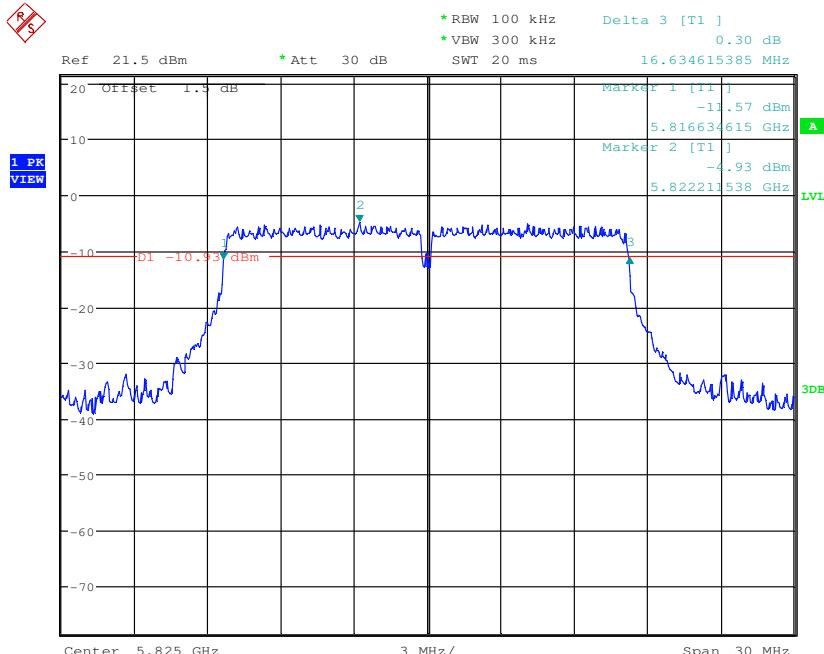
Test mode:	802.11a	Frequency(MHz):	5745
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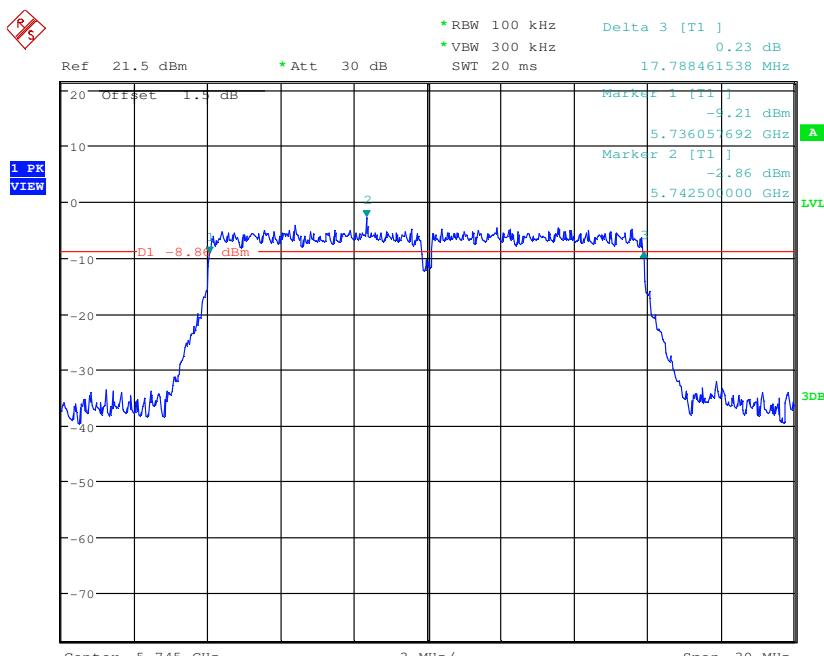
Test mode:	802.11a	Frequency(MHz):	5785
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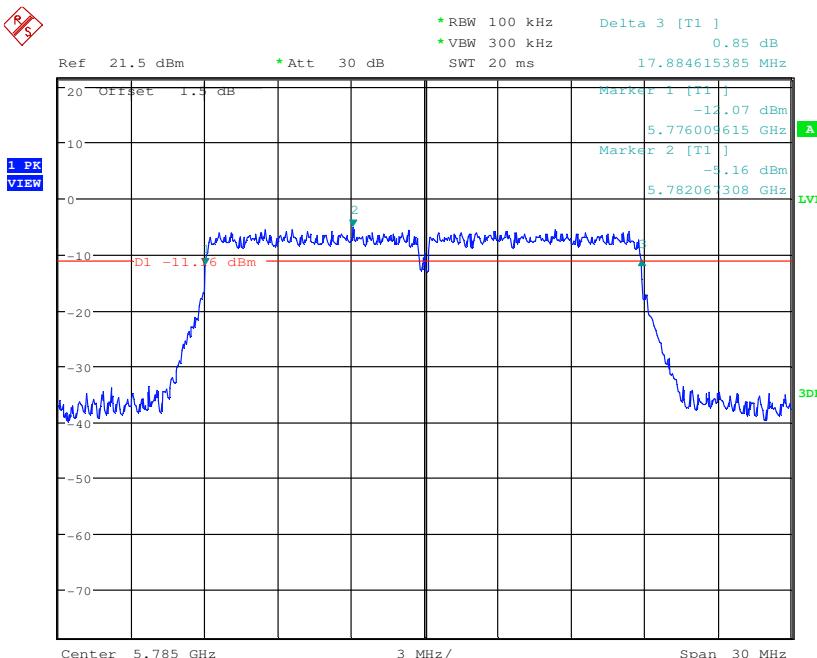
Test mode:	802.11a	Frequency(MHz):	5825
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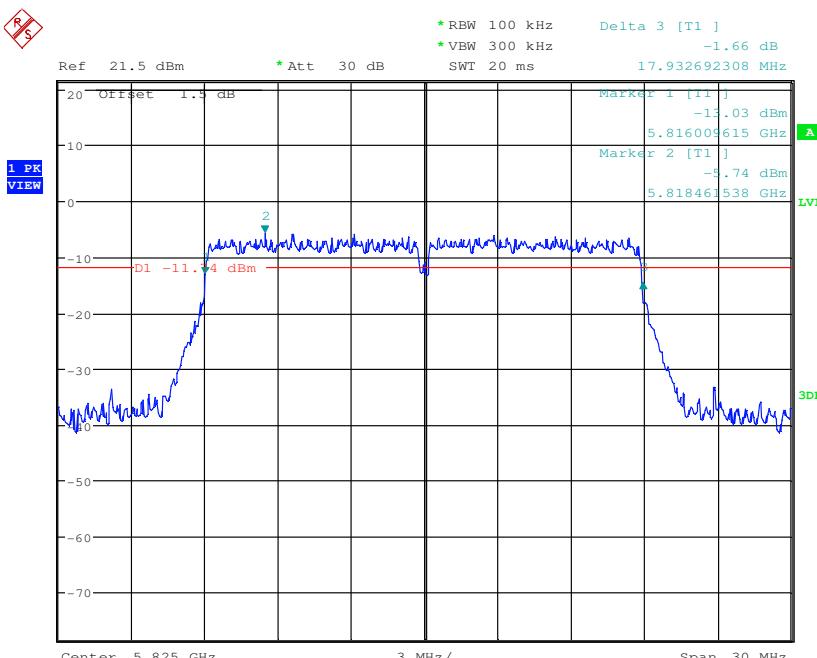
Test mode:	802.11n(HT20)	Frequency(MHz):	5745
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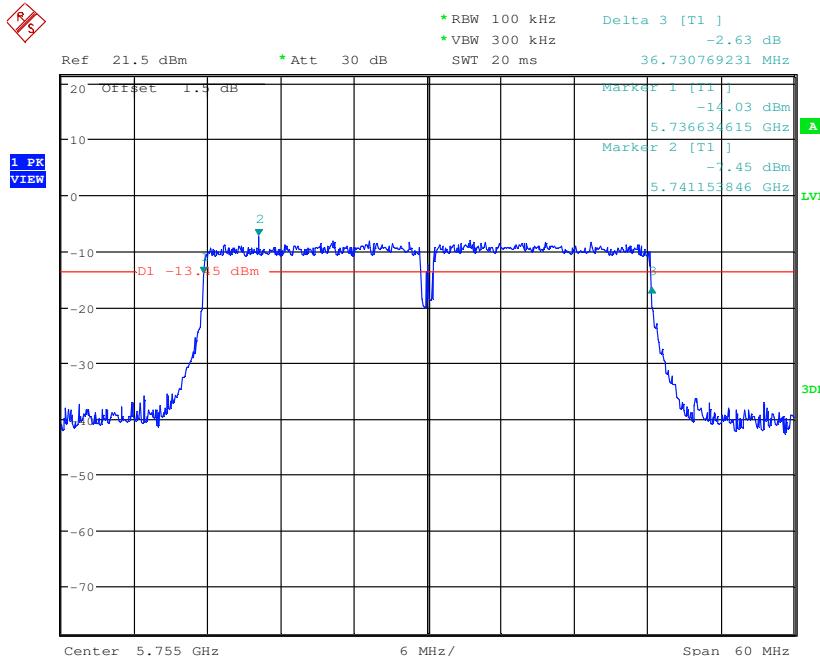
Test mode:	802.11n(HT20)	Frequency(MHz):	5785
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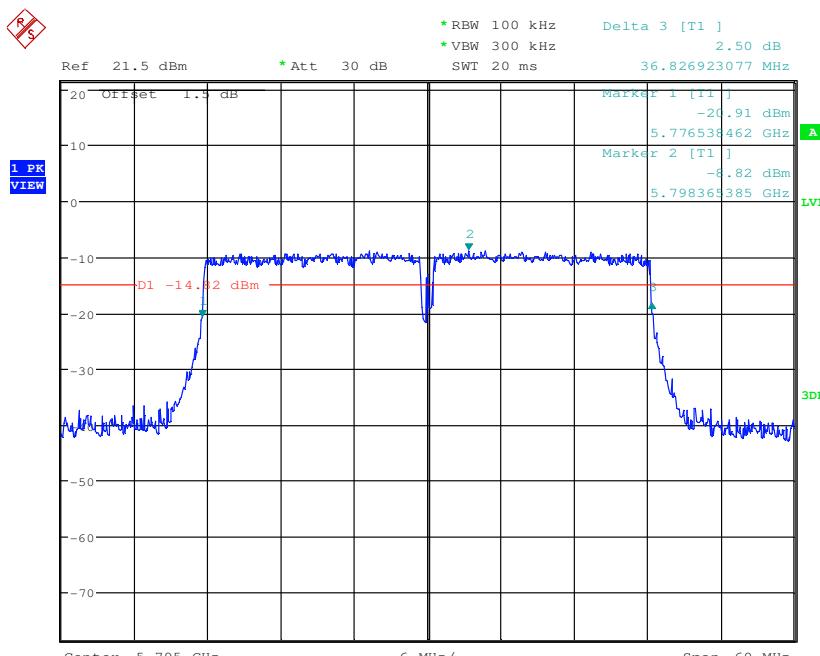
Test mode:	802.11n(HT20)	Frequency(MHz):	5825
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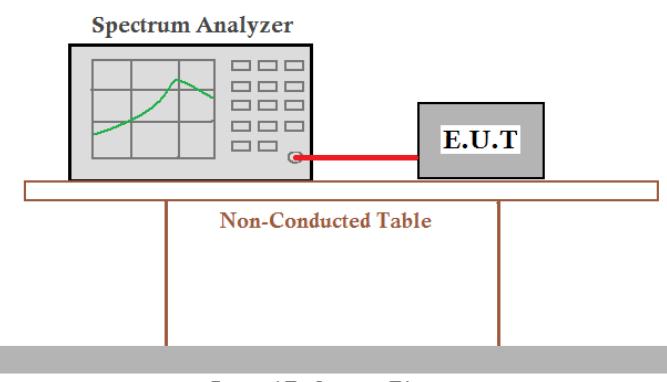
Test mode:	802.11n(HT40)	Frequency(MHz):	5755
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Test mode:	802.11n(HT40)	Frequency(MHz):	5795
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6.6 Power Spectral Density

Test Requirement:	47 CFR Part 15 Section 15.407(a)	
Test Method:	ANSI C63.10: 2013	
Test Setup:	 <p>Spectrum Analyzer E.U.T Non-Conducted Table Ground Reference Plane</p> <p><i>Remark: Offset the High-Frequency cable loss 1.5dB in the spectrum analyzer.</i></p>	
Test Instruments:	Refer to section 5.10 for details.	
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.	
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40). Only the worst case is recorded in the report.	
Limit:	Frequency Band	Limit
	5150-5250MHz	The power spectral density less than 11dBm/1MHz
	5250-5350MHz	The power spectral density less than 11dBm/1MHz
	5470-5725MHz	The power spectral density less than 11dBm/1MHz
	5725-5850MHz	The power spectral density less than 30dBm/500kHz
Test Results:	Pass	



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM150700437303
Page: 98 of 193

Measurement Data:

802.11a mode				
Frequency (MHz)	Power Spectral Density		Limit	Result
	Antenna 0	Antenna 1		
5180	0.26dBm/1MHz	-0.01dBm/1MHz	≤11dBm/1MHz	Pass
5200	0.28dBm/1MHz	0.22 dBm/1MHz	≤11dBm/1MHz	Pass
5240	0.73dBm/1MHz	0.45 dBm/1MHz	≤11dBm/1MHz	Pass
5260	0.84dBm/1MHz	0.34 dBm/1MHz	≤11dBm/1MHz	Pass
5300	1.17dBm/1MHz	-0.20dBm/1MHz	≤11dBm/1MHz	Pass
5320	1.24dBm/1MHz	-0.76dBm/1MHz	≤11dBm/1MHz	Pass
5500	0.27dBm/1MHz	0.11 dBm/1MHz	≤11dBm/1MHz	Pass
5600	0.61dBm/1MHz	0.16 dBm/1MHz	≤11dBm/1MHz	Pass
5700	1.46dBm/1MHz	-1.89dBm/1MHz	≤11dBm/1MHz	Pass
5745	-1.89dBm/500kHz	-3.24dBm/1MHz	≤30dBm/500kHz	Pass
5785	-2.89dBm/500kHz	-4.19dBm/1MHz	≤30dBm/500kHz	Pass
5825	-3.77dBm/500kHz	-5.11dBm/1MHz	≤30dBm/500kHz	Pass

802.11n(HT20) mode				
Frequency (MHz)	Power Spectral Density		Limit	Result
	Antenna 0	Antenna 1		
5180	-1.51dBm/1MHz	-2.79dBm/1MHz	≤11dBm/1MHz	Pass
5200	-1.59dBm/1MHz	-2.30dBm/1MHz	≤11dBm/1MHz	Pass
5240	-1.23dBm/1MHz	-1.51dBm/1MHz	≤11dBm/1MHz	Pass
5260	0.56dBm/1MHz	-2.23dBm/1MHz	≤11dBm/1MHz	Pass
5300	0.09dBm/1MHz	-2.72dBm/1MHz	≤11dBm/1MHz	Pass
5320	0.11dBm/1MHz	-2.95dBm/1MHz	≤11dBm/1MHz	Pass
5500	-1.51dBm/1MHz	-1.30dBm/1MHz	≤11dBm/1MHz	Pass
5600	-1.13dBm/1MHz	-1.28dBm/1MHz	≤11dBm/1MHz	Pass
5700	-0.35dBm/1MHz	-3.16dBm/1MHz	≤11dBm/1MHz	Pass
5745	-2.88dBm/500kHz	-5.58dBm/1MHz	≤30dBm/500kHz	Pass
5785	-4.19dBm/500kHz	-6.70dBm/1MHz	≤30dBm/500kHz	Pass
5825	-4.89dBm/500kHz	-7.85dBm/1MHz	≤30dBm/500kHz	Pass

802.11n(HT40) mode				
Frequency (MHz)	Power Spectral Density		Limit	Result
	Antenna 0	Antenna 1		
5190	-4.43dBm/1MHz	-5.05 dBm/1MHz	≤11dBm/1MHz	Pass
5230	-4.40dBm/1MHz	-4.89 dBm/1MHz	≤11dBm/1MHz	Pass
5270	-3.10dBm/1MHz	-5.48 dBm/1MHz	≤11dBm/1MHz	Pass
5310	-2.42dBm/1MHz	-5.96 dBm/1MHz	≤11dBm/1MHz	Pass
5510	-4.09dBm/1MHz	-4.35 dBm/1MHz	≤11dBm/1MHz	Pass
5590	-4.23dBm/1MHz	-4.22 dBm/1MHz	≤11dBm/1MHz	Pass
5670	-3.16dBm/1MHz	-5.44 dBm/1MHz	≤11dBm/1MHz	Pass
5755	-6.28dBm/500kHz	-8.88 dBm/1MHz	≤30dBm/500kHz	Pass
5795	-6.92dBm/500kHz	-9.85 dBm/1MHz	≤30dBm/500kHz	Pass

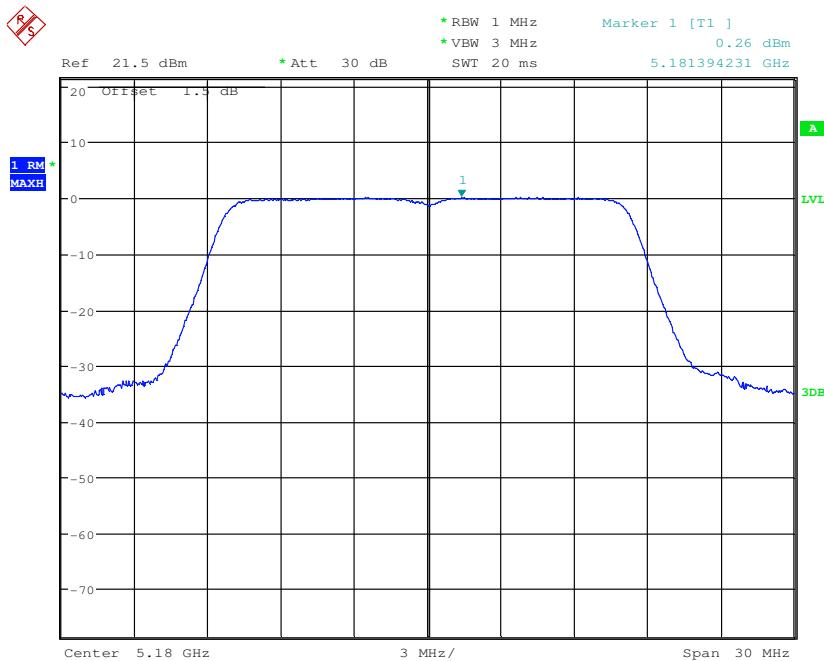


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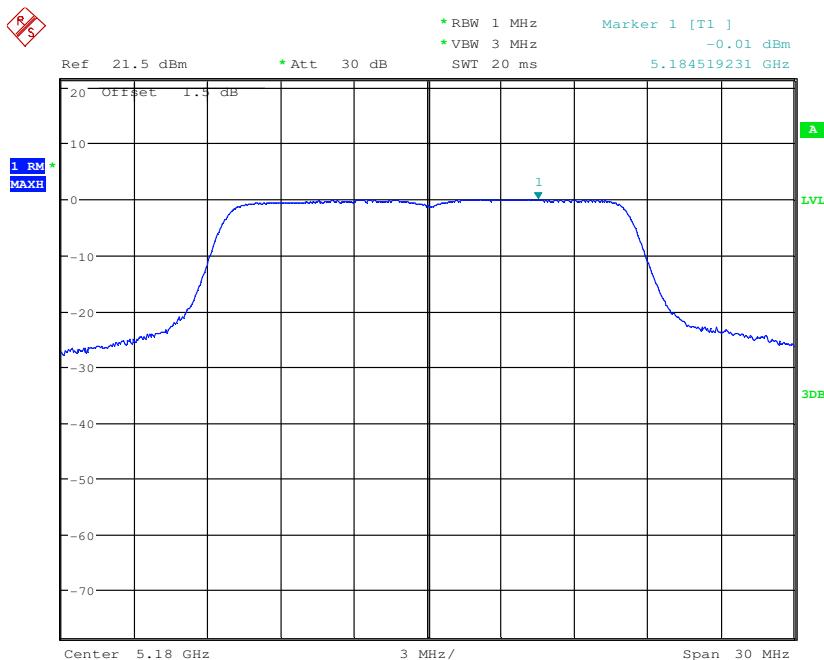
Test plot as follows:

Test mode:	802.11a	Frequency(MHz):	5180
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Antenna 0

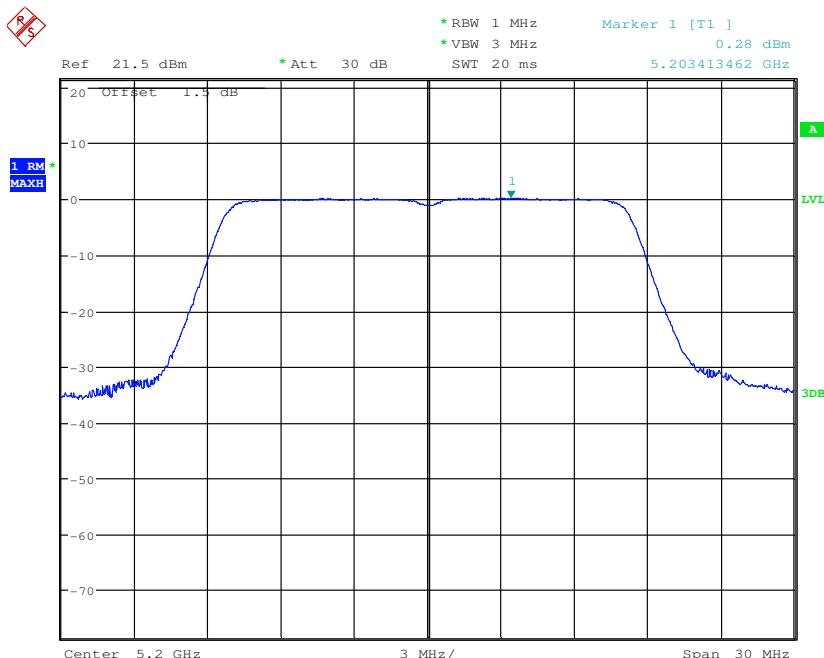


Antenna 1

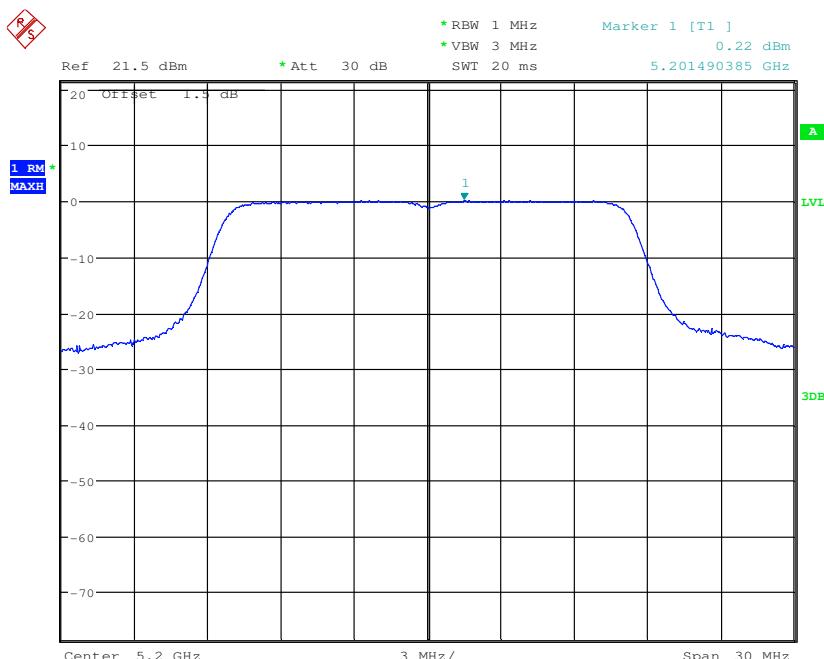


Test mode:	802.11a	Frequency(MHz):	5200
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Antenna 0

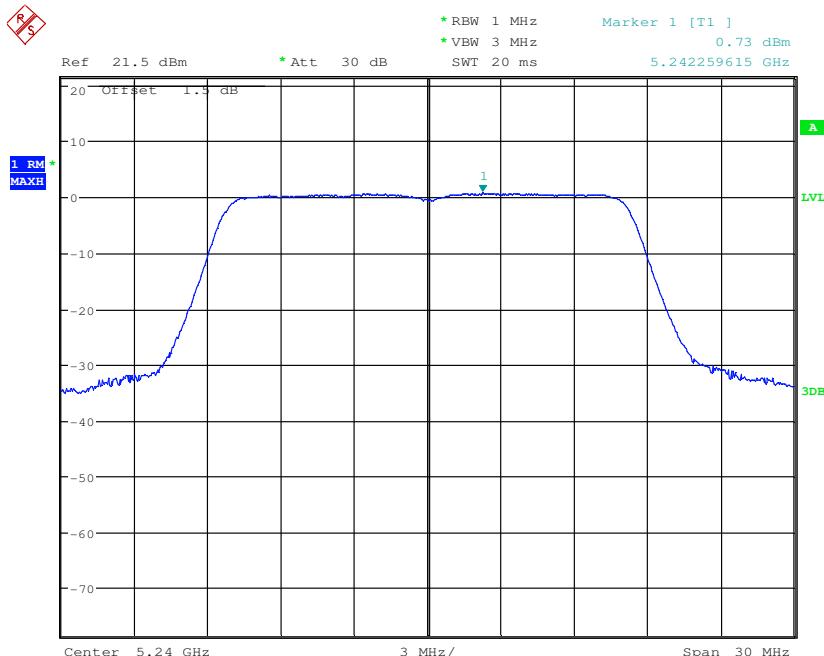


Antenna 1

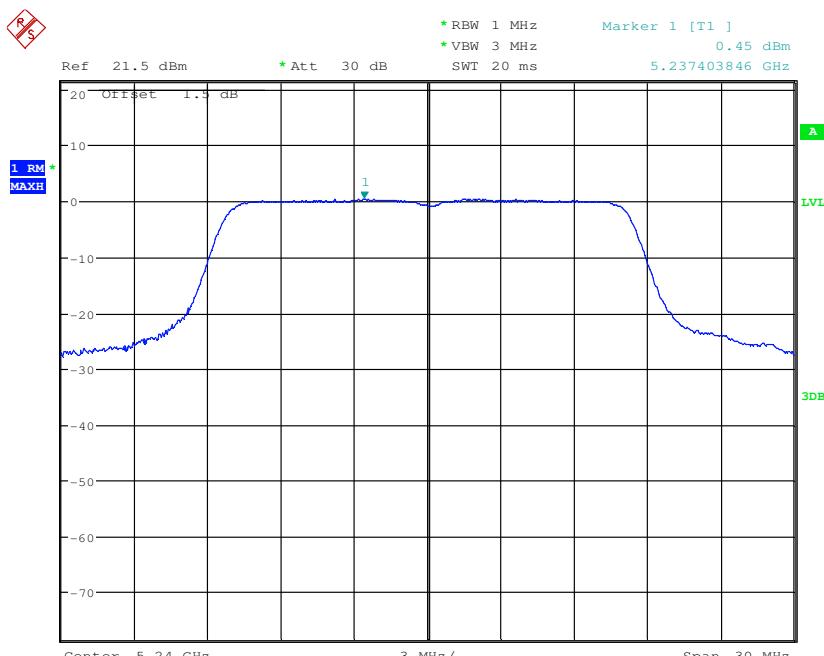


Test mode:	802.11a	Frequency(MHz):	5240
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Antenna 0

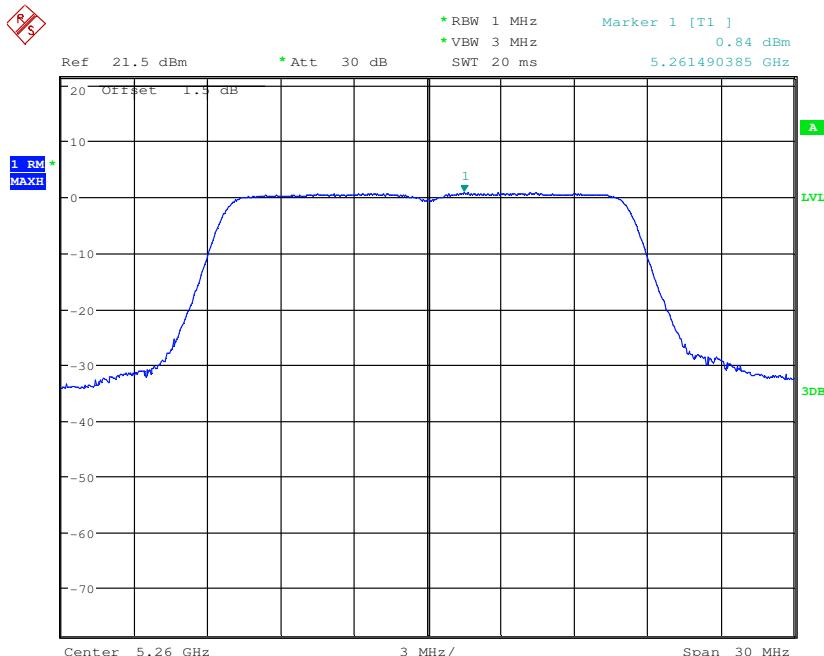


Antenna 1

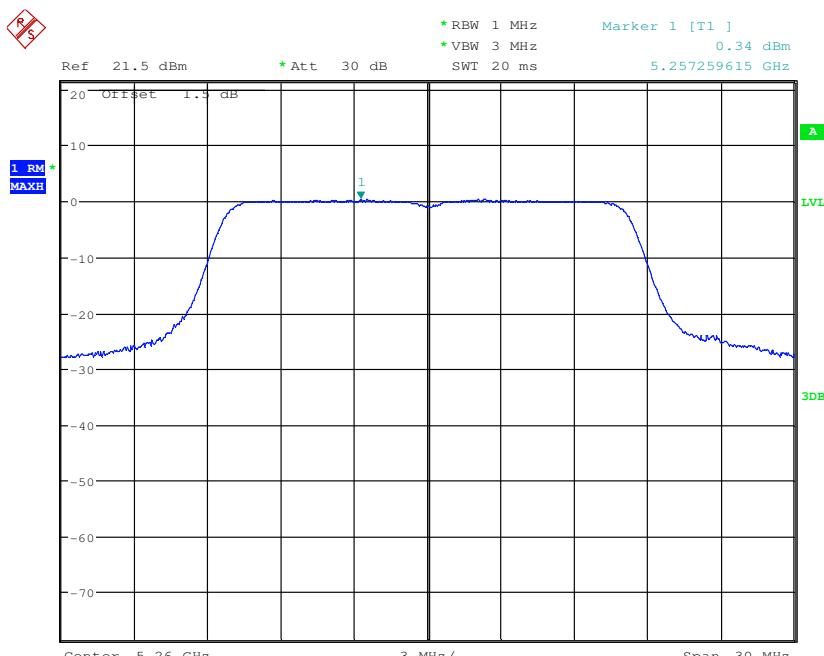


Test mode:	802.11a	Frequency(MHz):	5260
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Antenna 0

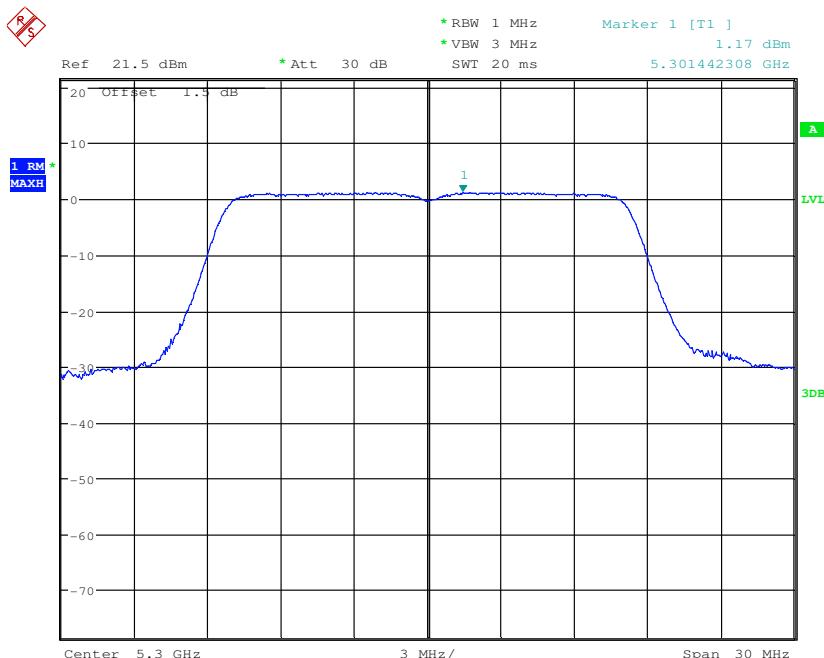


Antenna 1

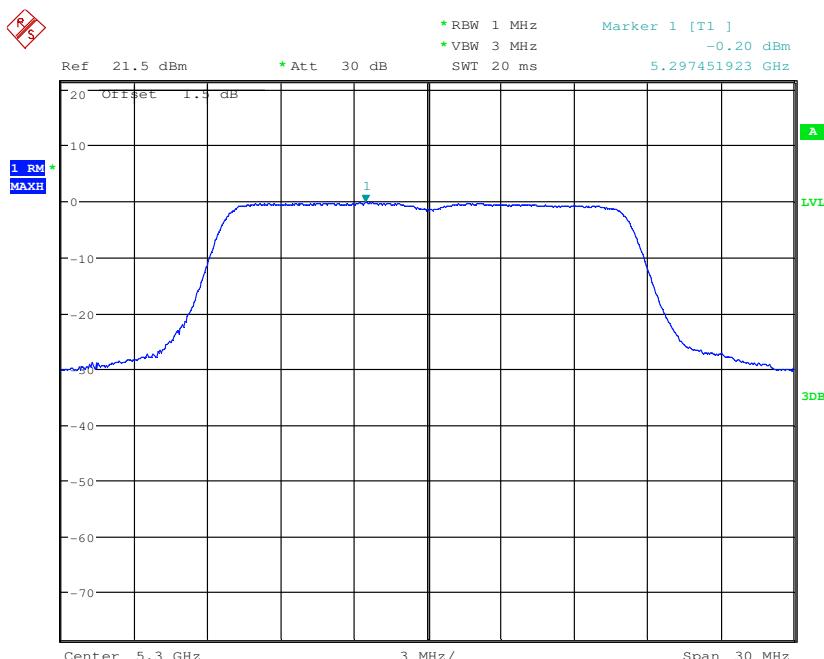


Test mode:	802.11a	Frequency(MHz):	5300
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Antenna 0

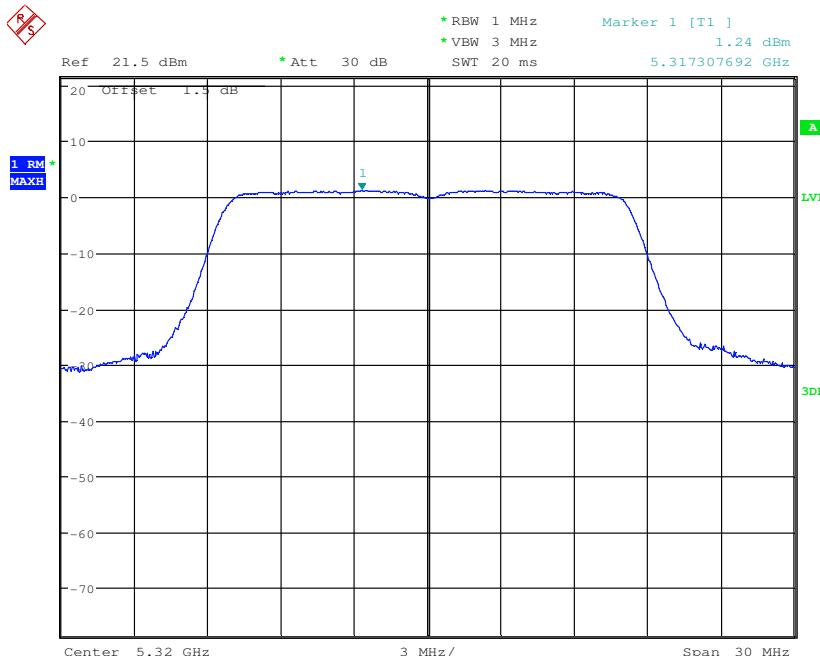


Antenna 1

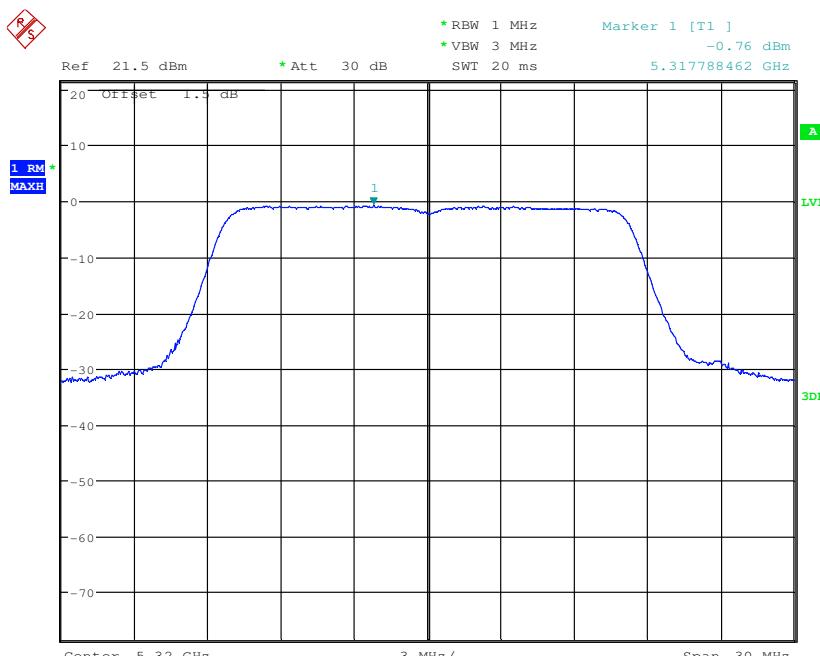


Test mode:	802.11a	Frequency(MHz):	5320
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Antenna 0

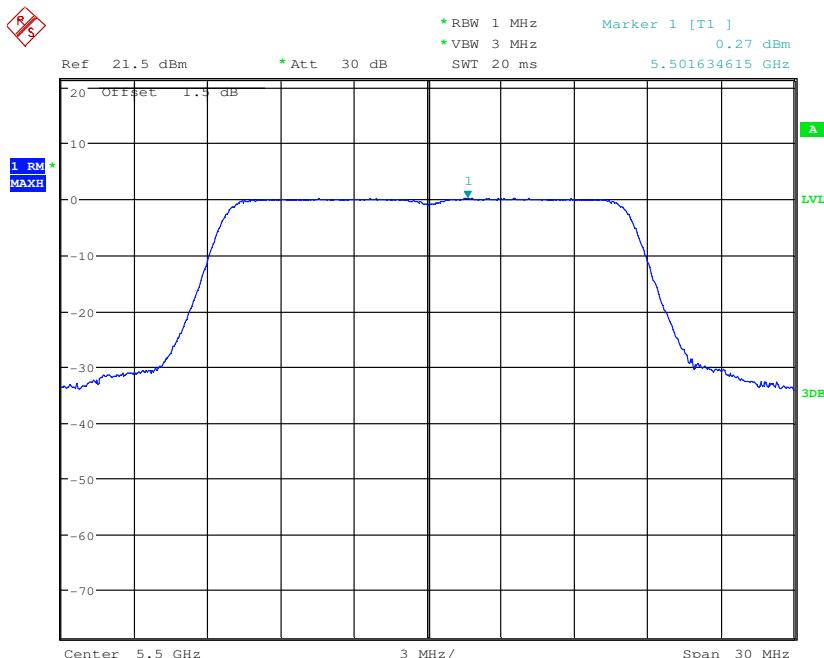


Antenna 1

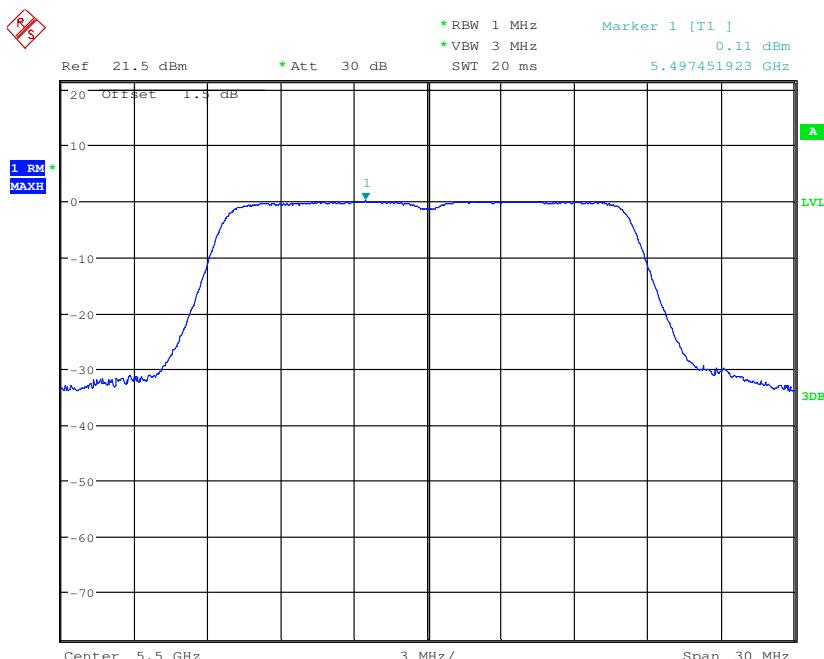


Test mode:	802.11a	Frequency(MHz):	5500
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Antenna 0

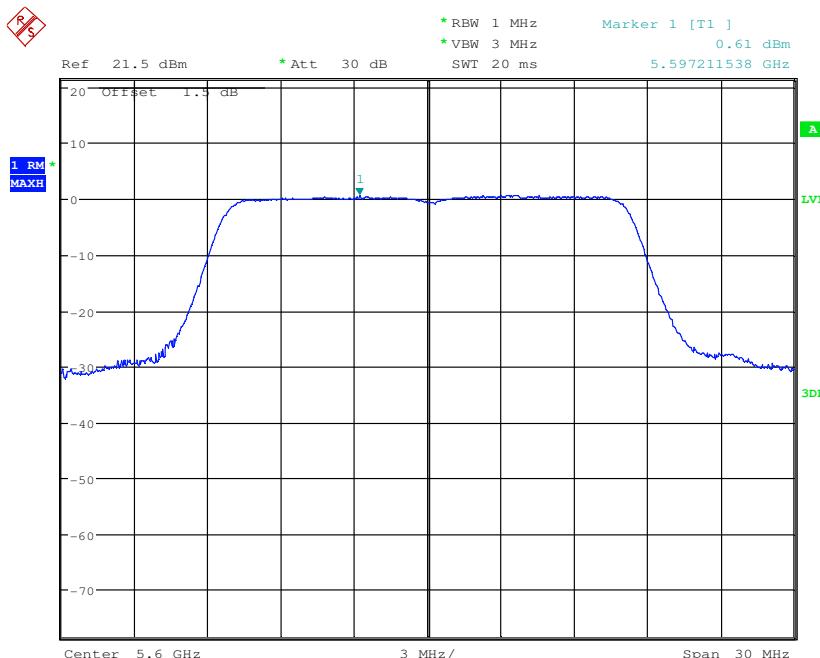


Antenna 1

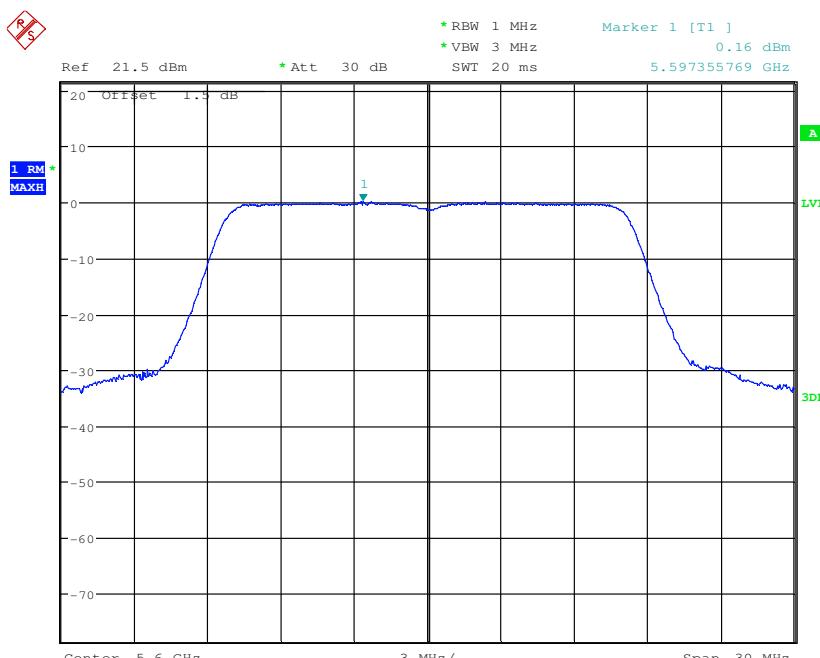


Test mode:	802.11a	Frequency(MHz):	5600
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Antenna 0

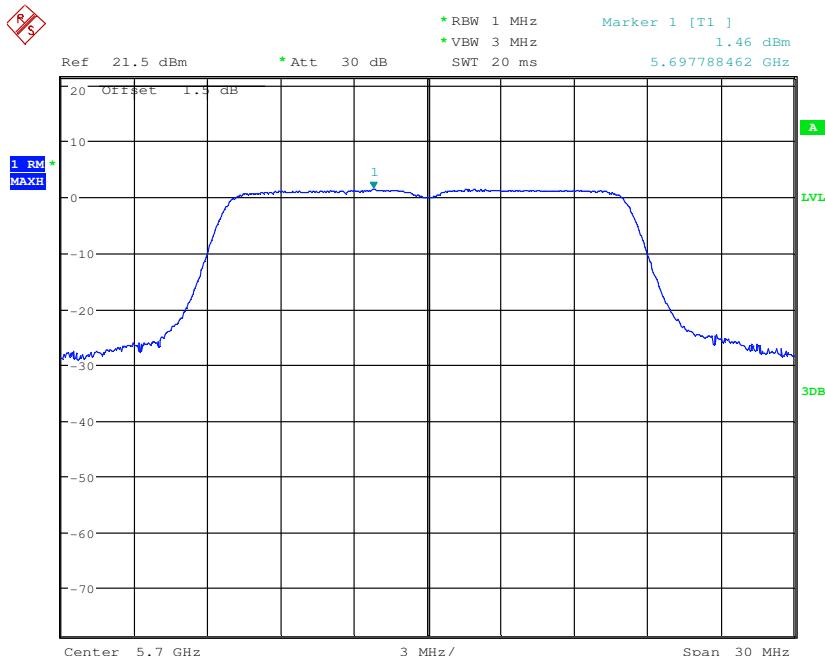


Antenna 1

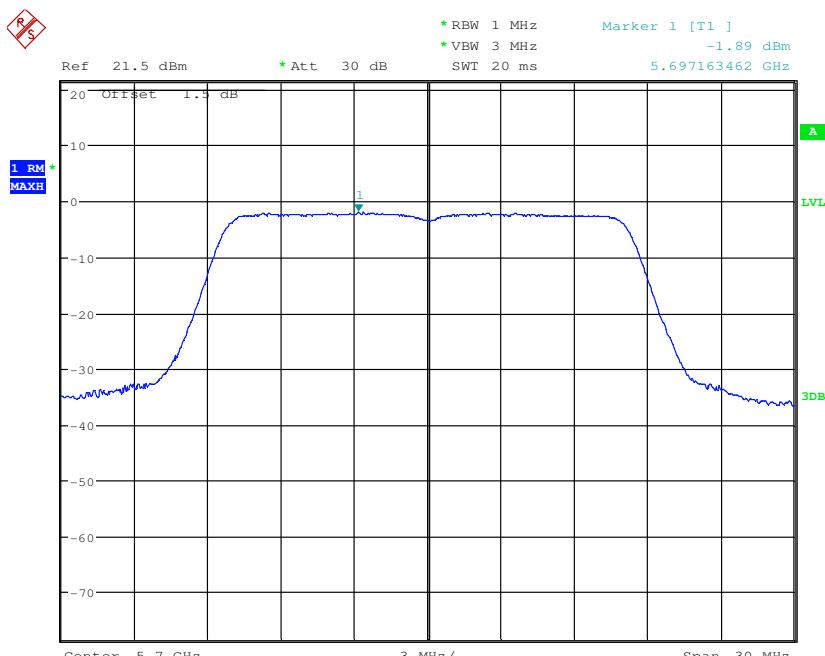


Test mode:	802.11a	Frequency(MHz):	5700
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Antenna 0

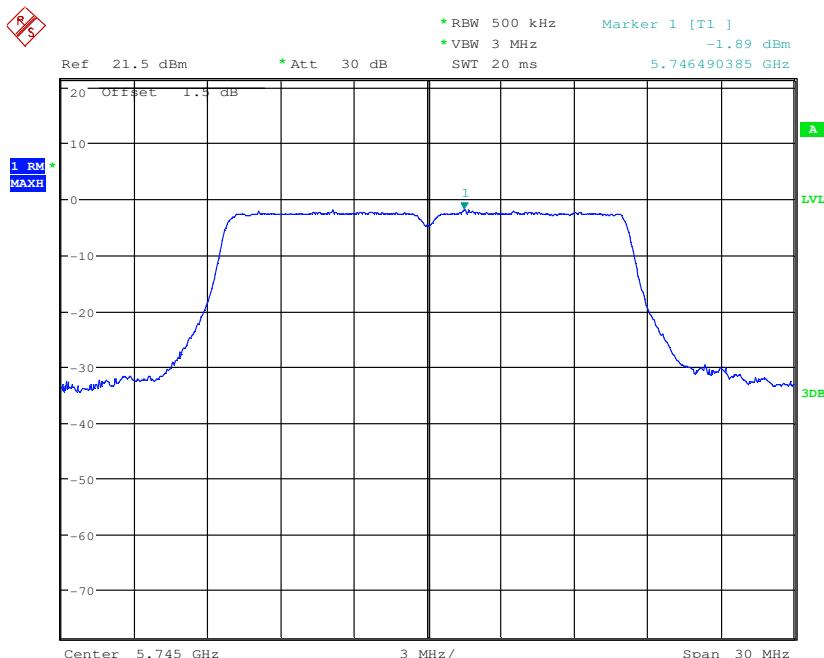


Antenna 1

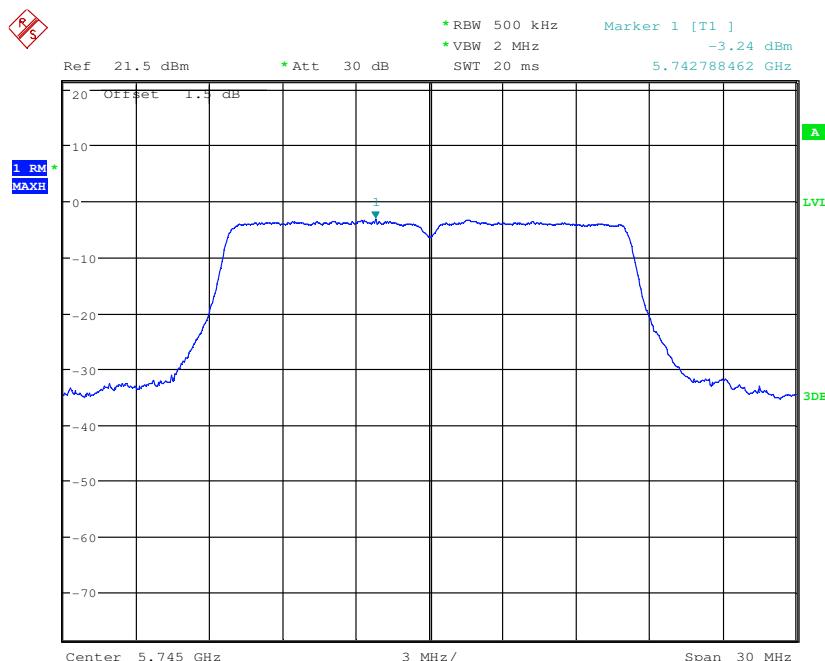


Test mode:	802.11a	Frequency(MHz):	5745
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Antenna 0

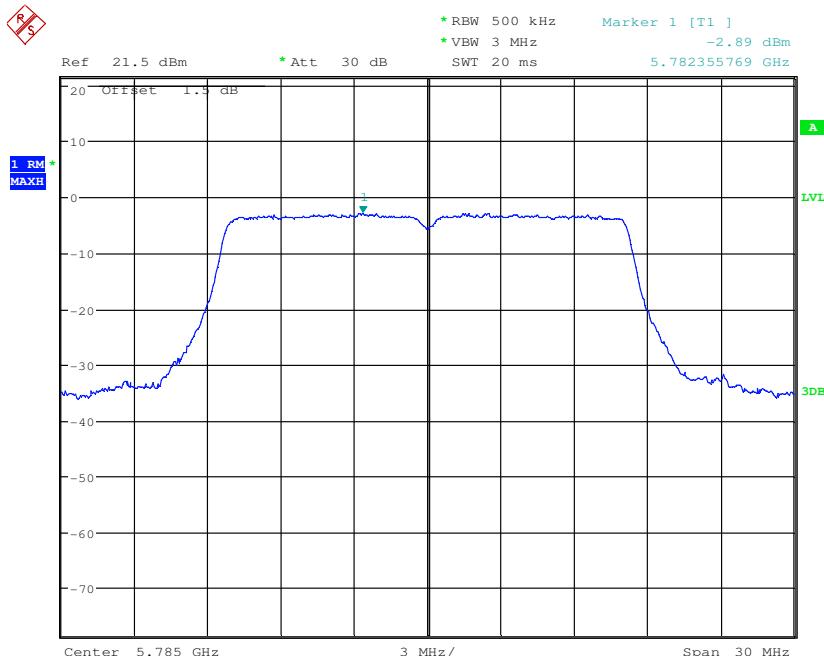


Antenna 1

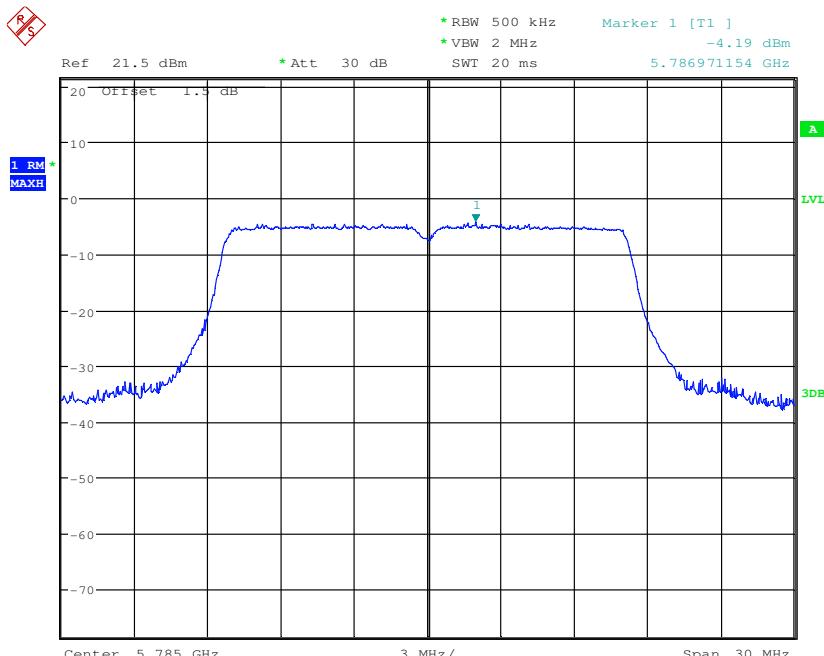


Test mode:	802.11a	Frequency(MHz):	5785
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Antenna 0

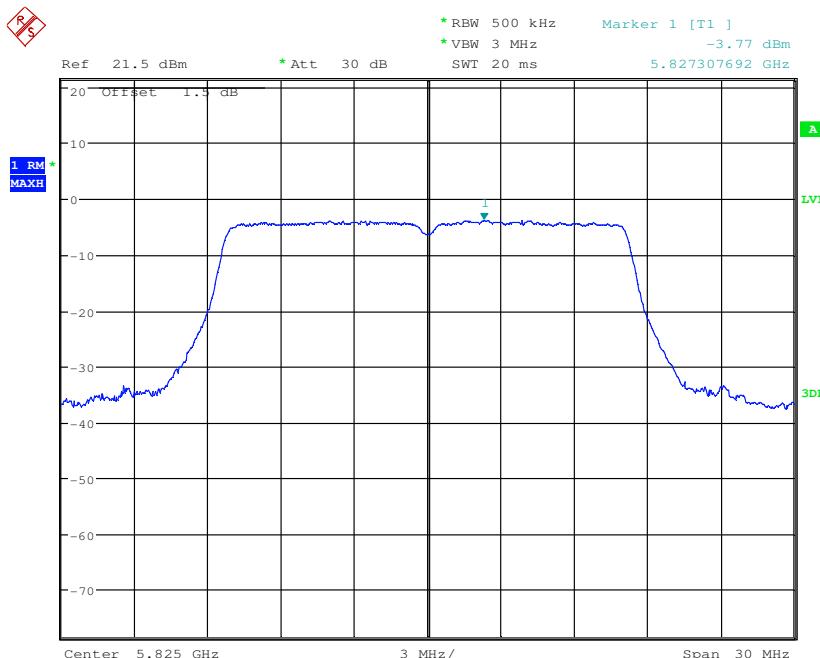


Antenna 1

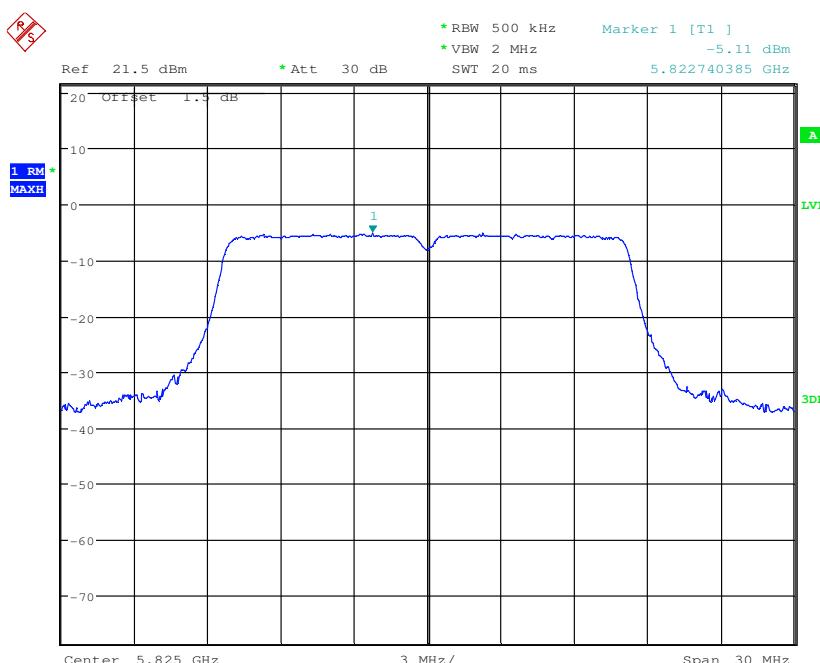


Test mode:	802.11a	Frequency(MHz):	5825
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Antenna 0

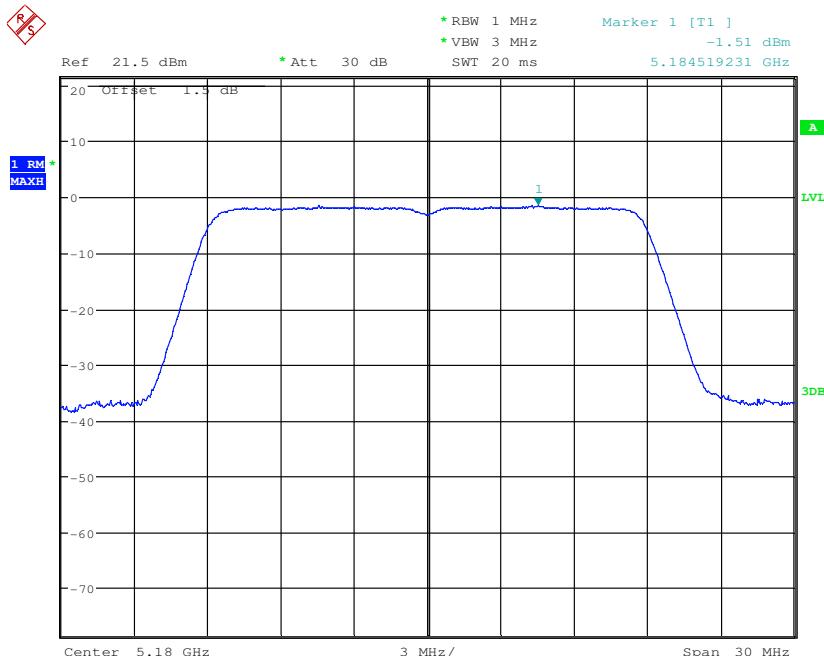


Antenna 1

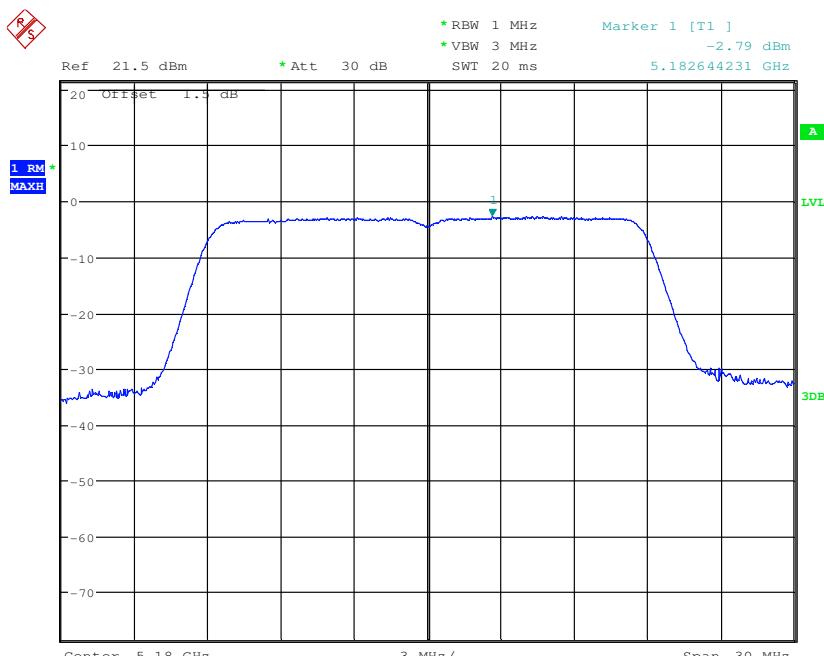


Test mode:	802.11n(HT20)	Frequency(MHz):	5180
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Antenna 0

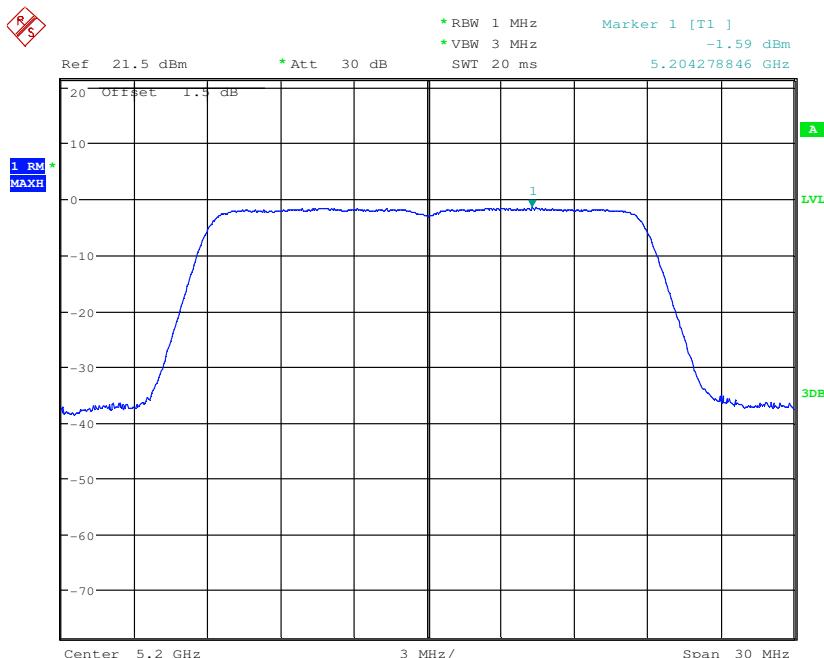


Antenna 1

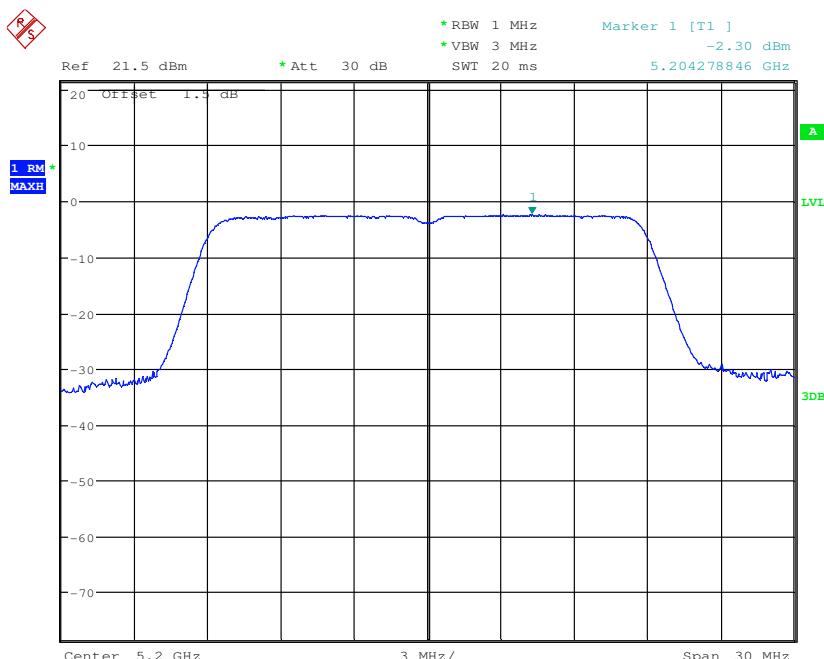


Test mode:	802.11n(HT20)	Frequency(MHz):	5200
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Antenna 0

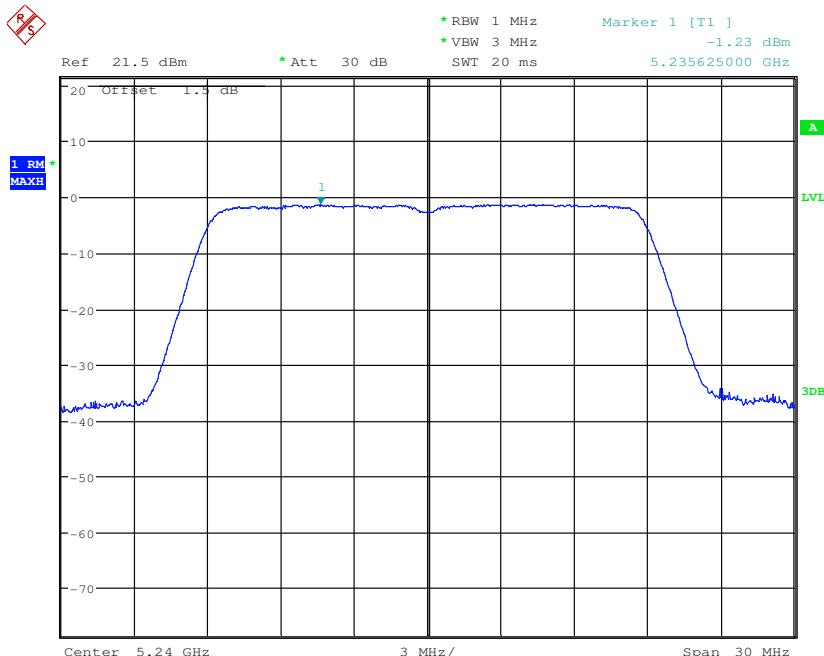


Antenna 1

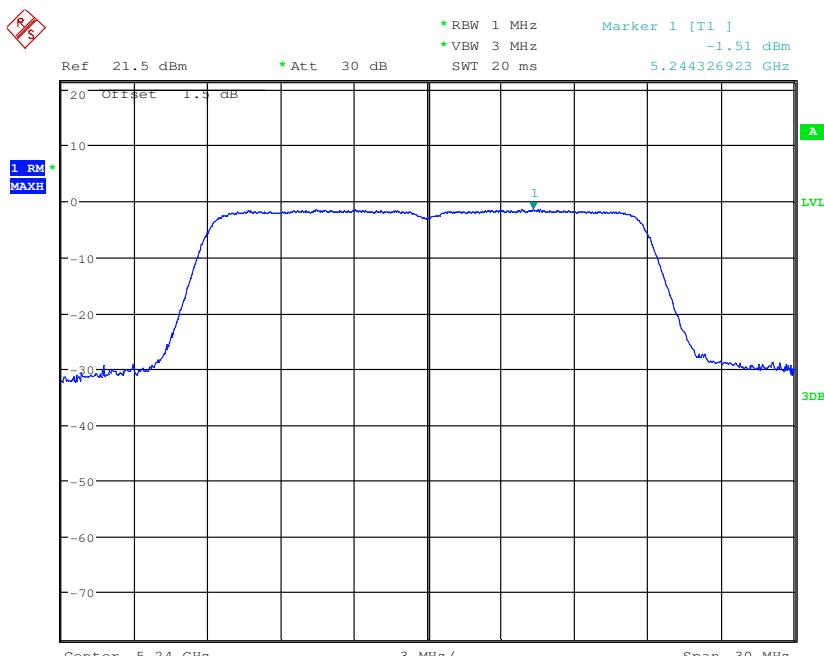


Test mode:	802.11n(HT20)	Frequency(MHz):	5240
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Antenna 0

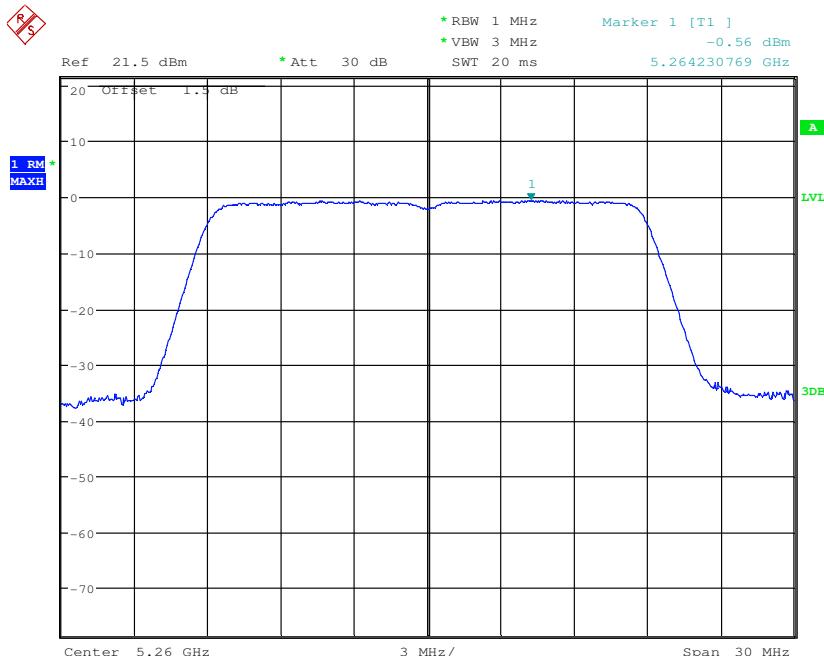


Antenna 1

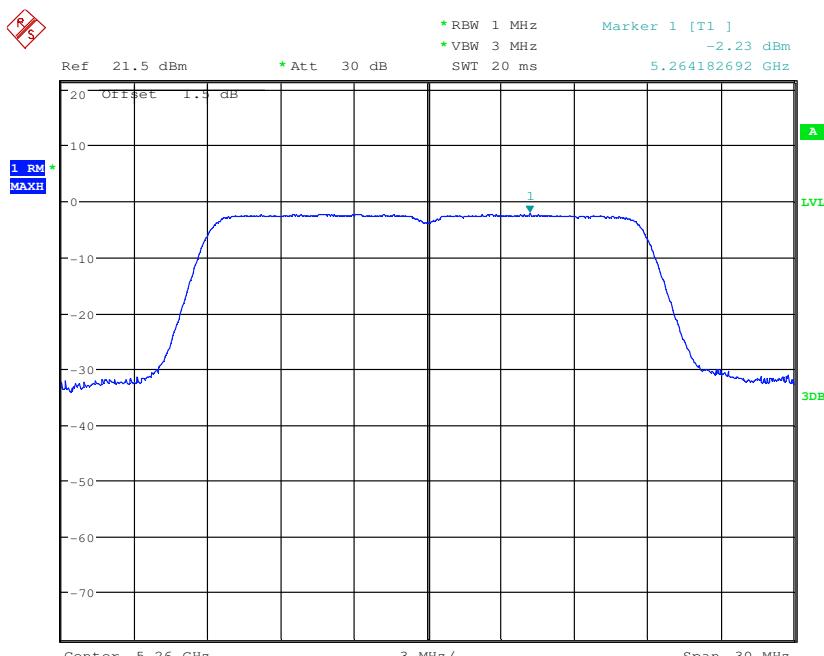


Test mode:	802.11n(HT20)	Frequency(MHz):	5260
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Antenna 0

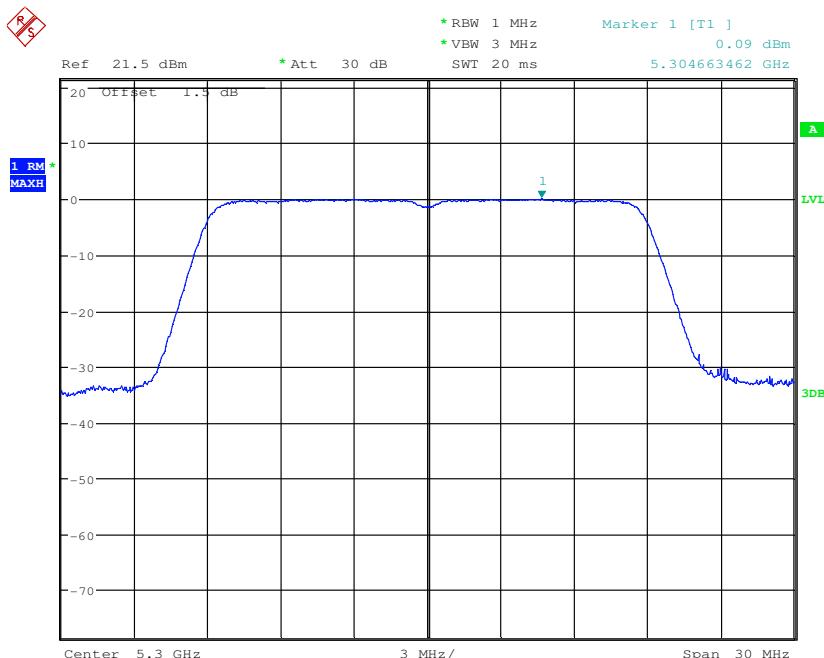


Antenna 1

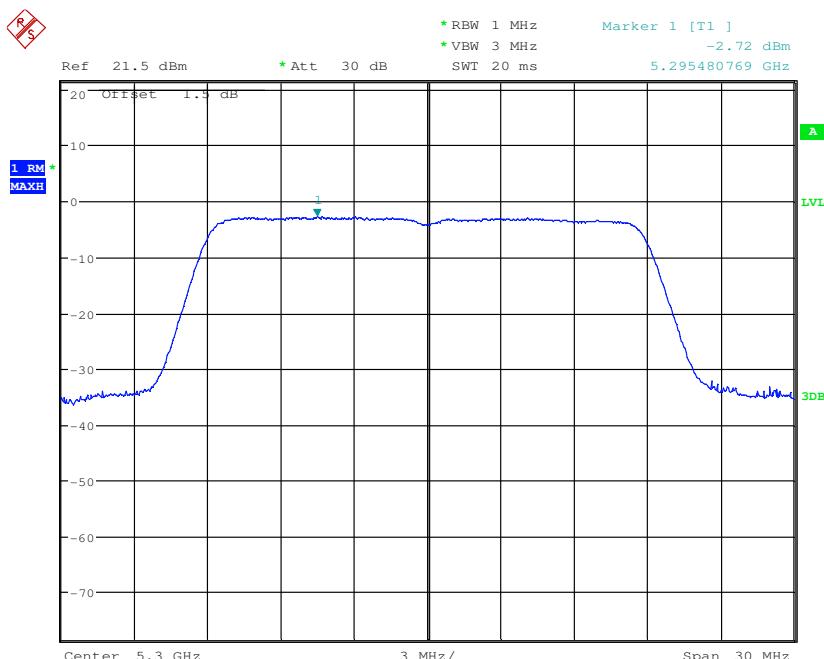


Test mode:	802.11n(HT20)	Frequency(MHz):	5300
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Antenna 0

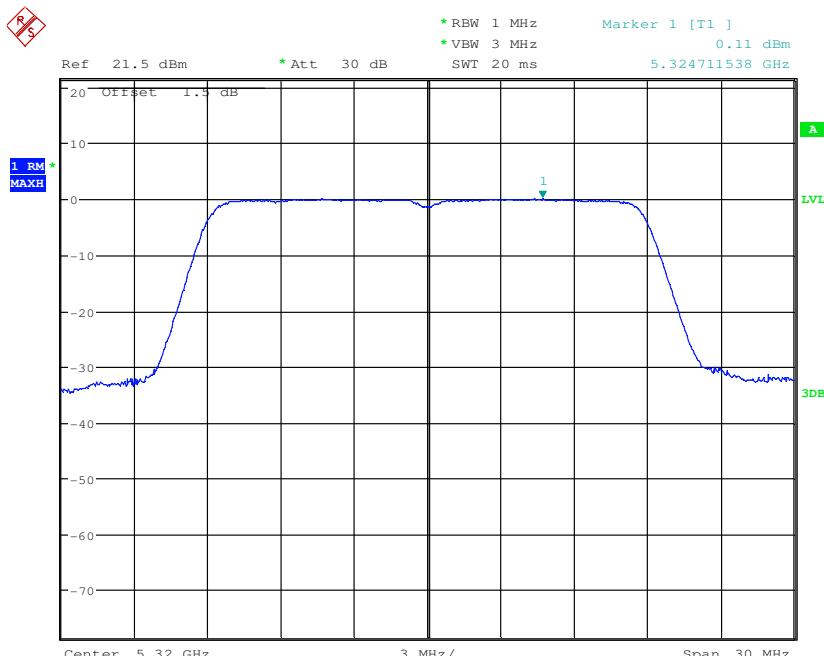


Antenna 1

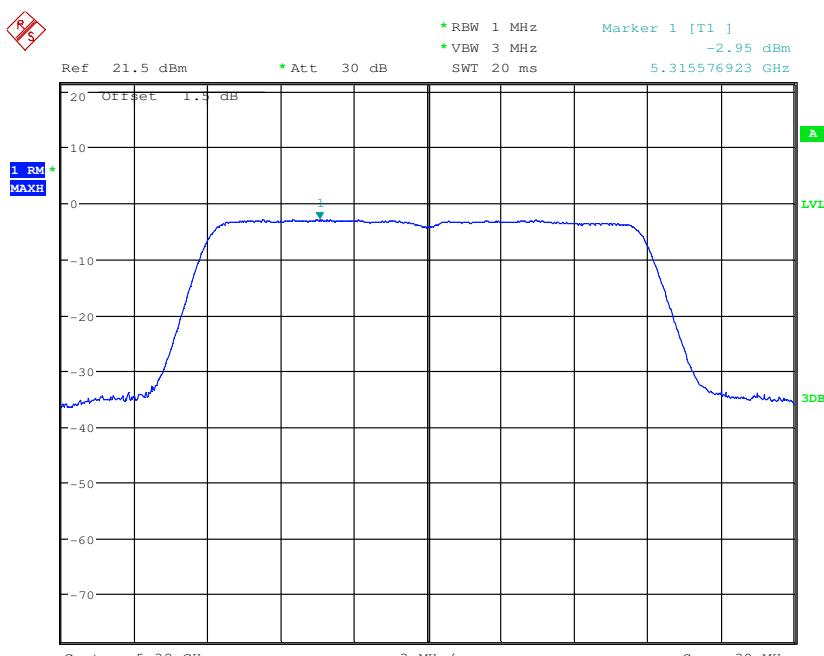


Test mode:	802.11n(HT20)	Frequency(MHz):	5320
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Antenna 0

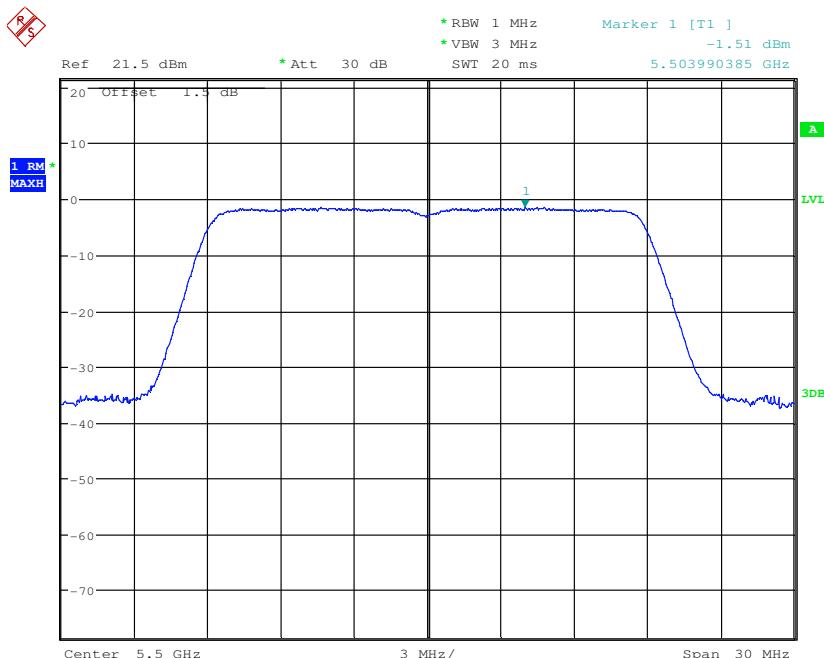


Antenna 1

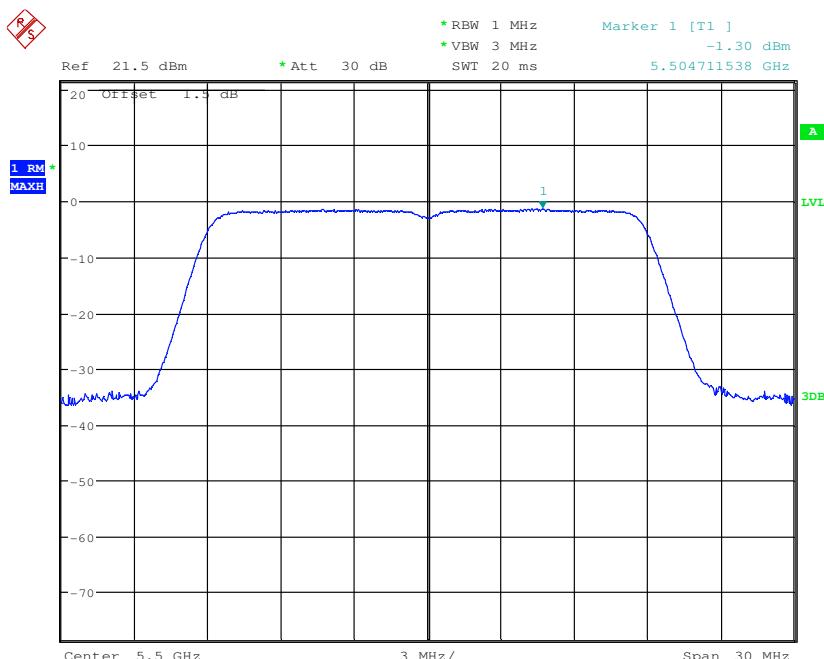


Test mode:	802.11n(HT20)	Frequency(MHz):	5500
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Antenna 0



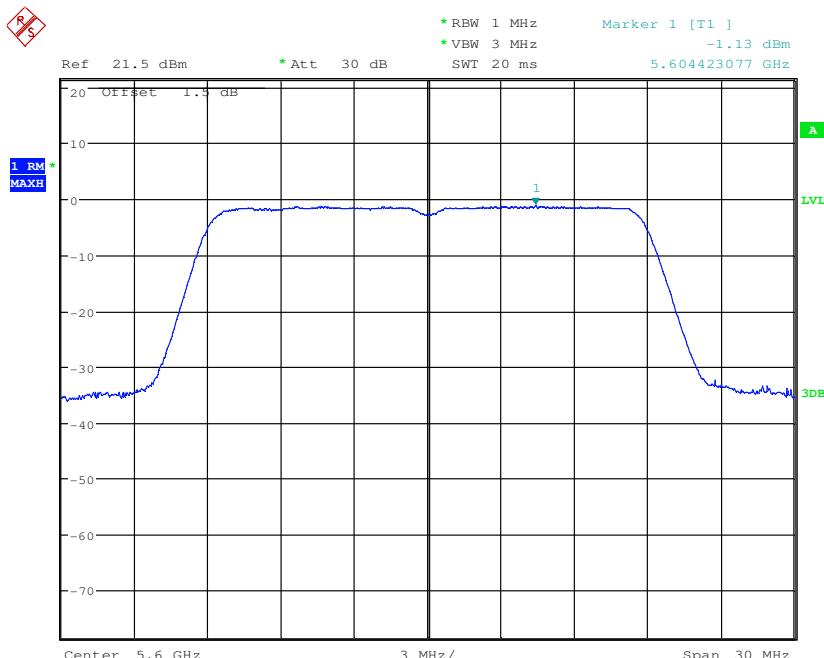
Antenna 1



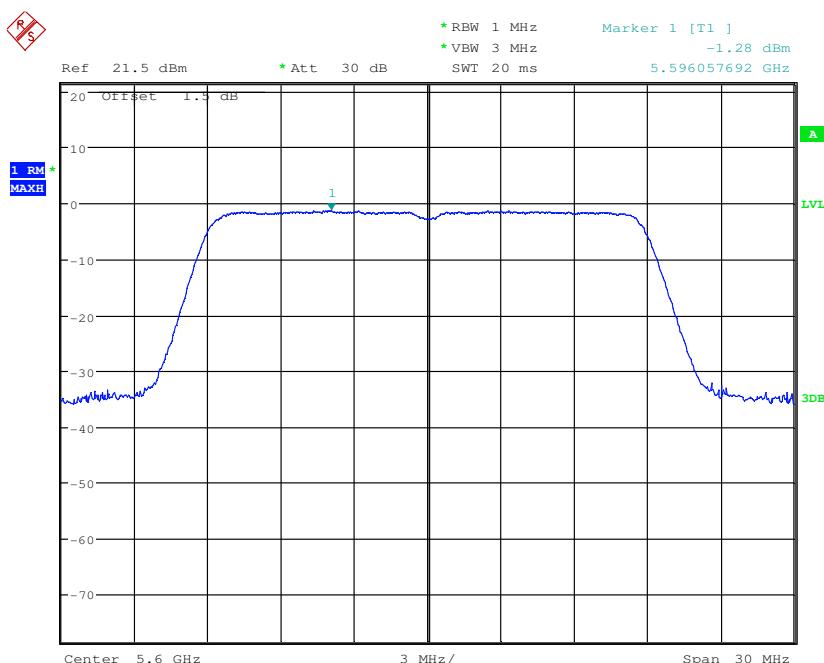
Report No.: SZEM150700437303
Page: 119 of 193

Test mode:	802.11n(HT20)	Frequency(MHz):	5600
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Antenna 0

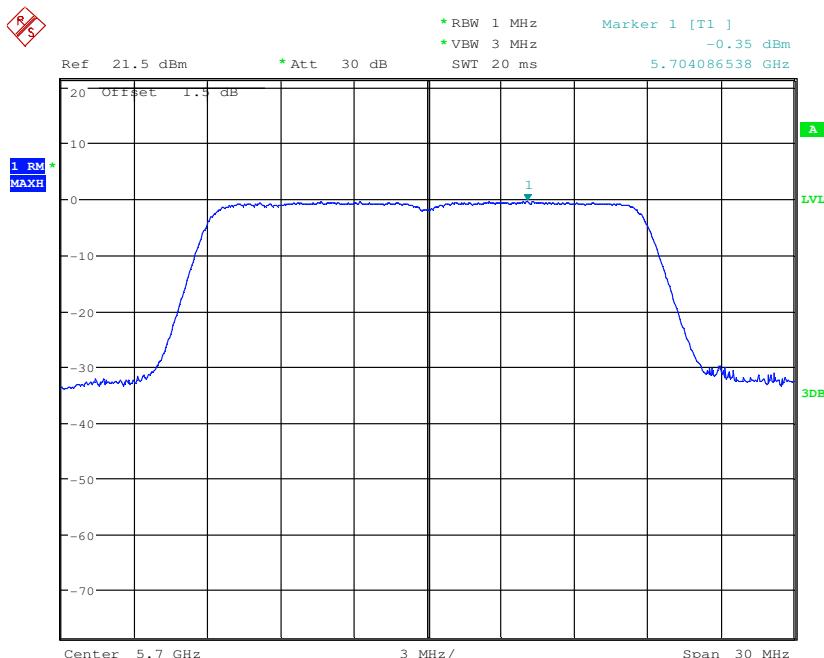


Antenna 1

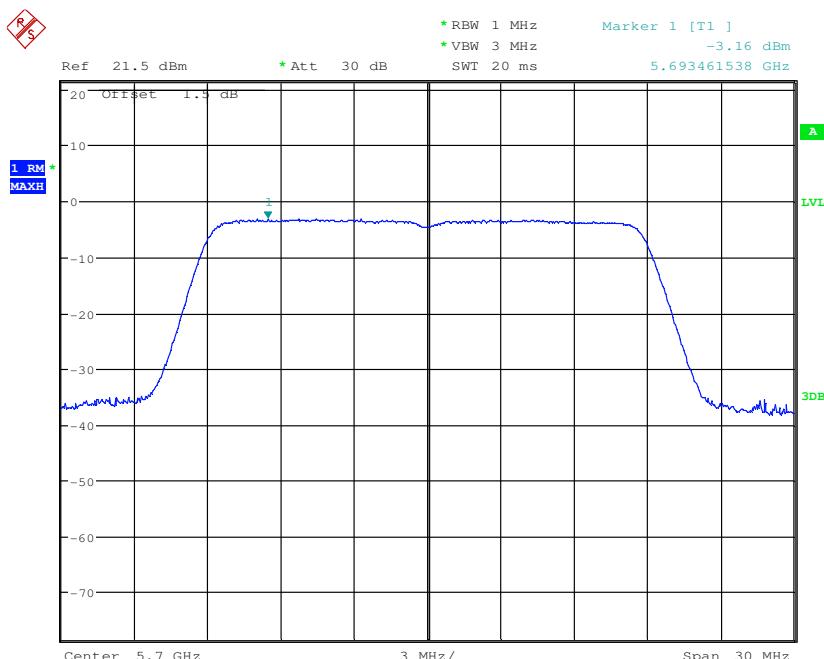


Test mode:	802.11n(HT20)	Frequency(MHz):	5700
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Antenna 0

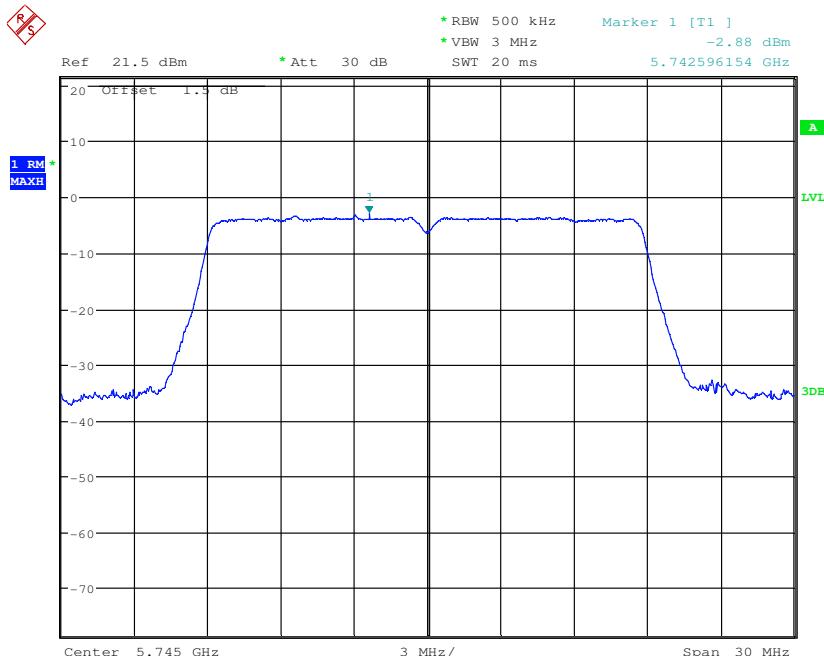


Antenna 1

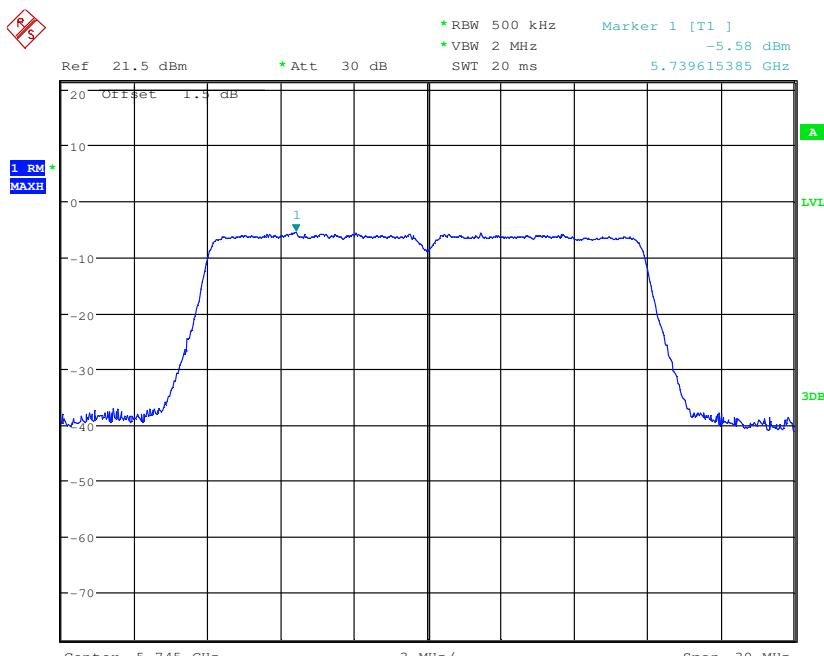


Test mode:	802.11n(HT20)	Frequency(MHz):	5745
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Antenna 0

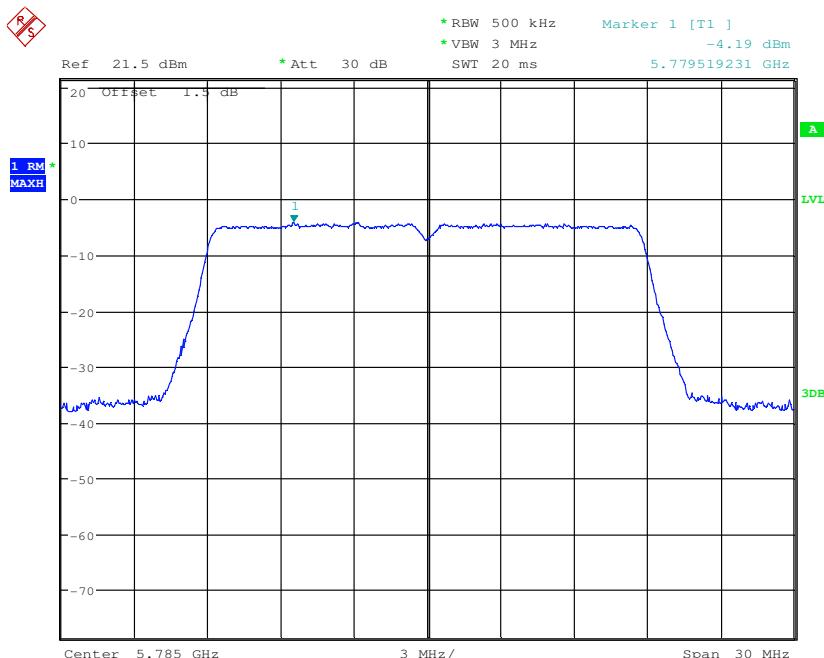


Antenna 1

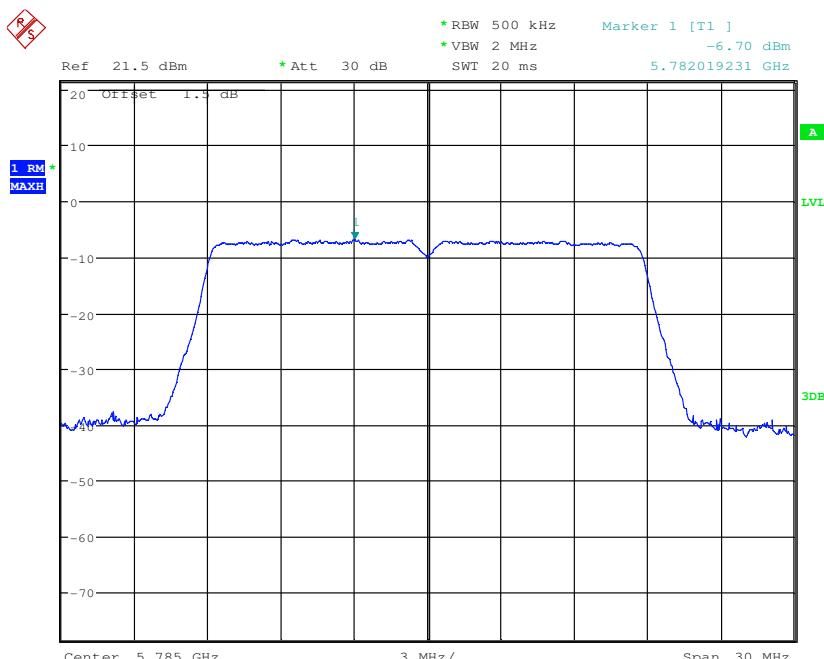


Test mode:	802.11n(HT20)	Frequency(MHz):	5785
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Antenna 0

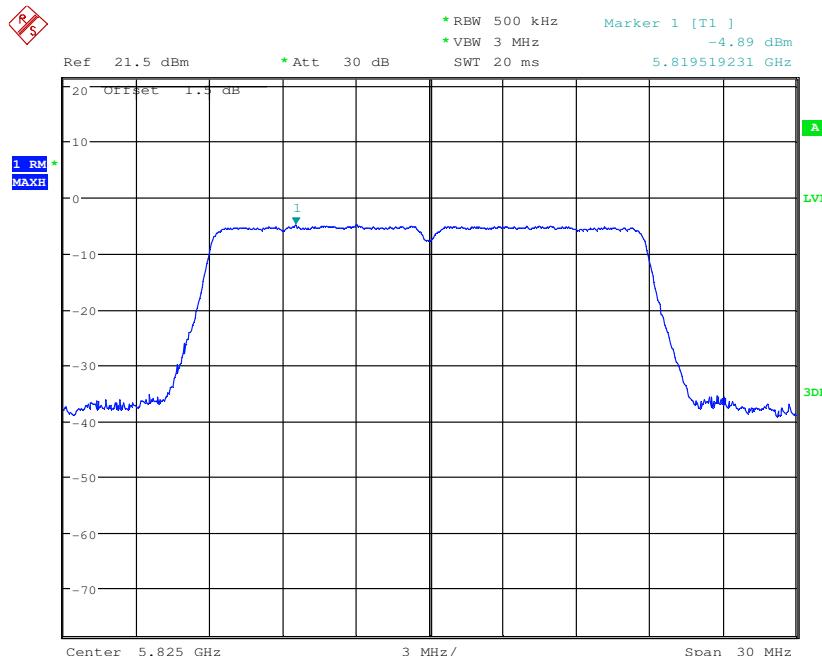


Antenna 1

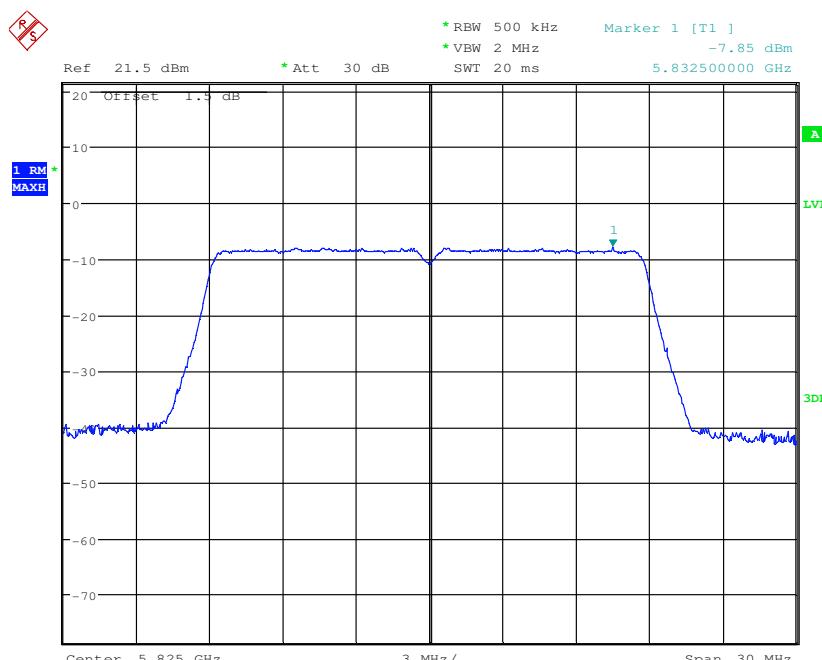


Test mode:	802.11n(HT20)	Frequency(MHz):	5825
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Antenna 0

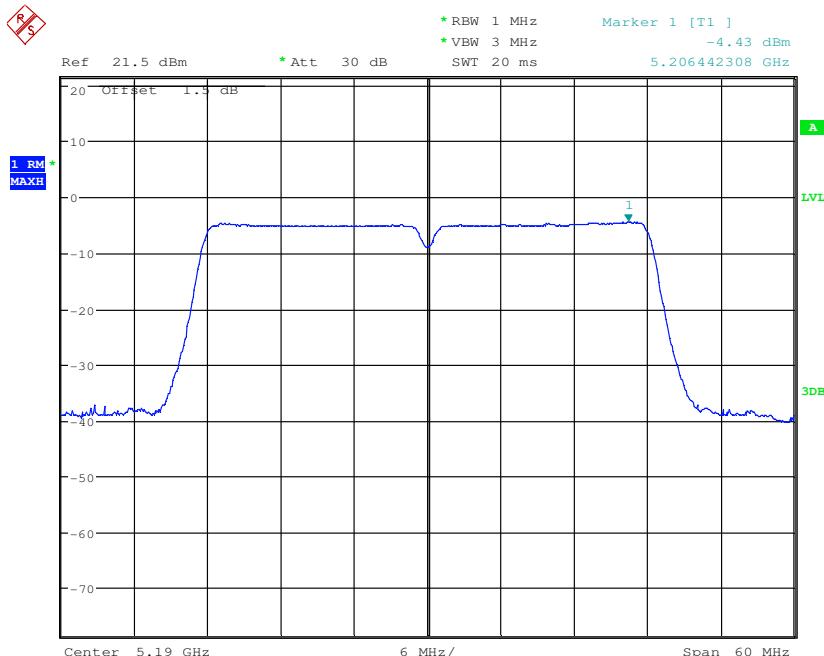


Antenna 1

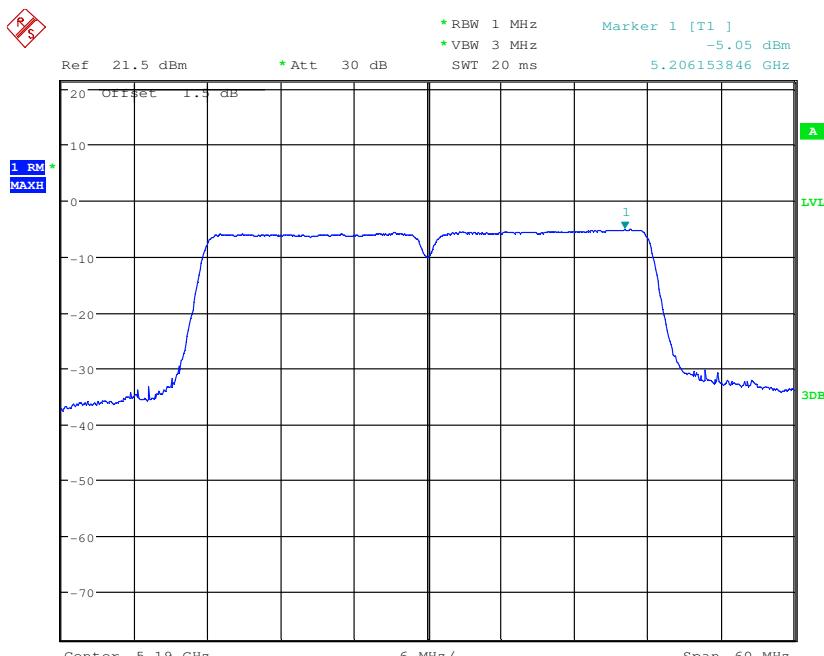


Test mode:	802.11n(HT40)	Frequency(MHz):	5190
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Antenna 0

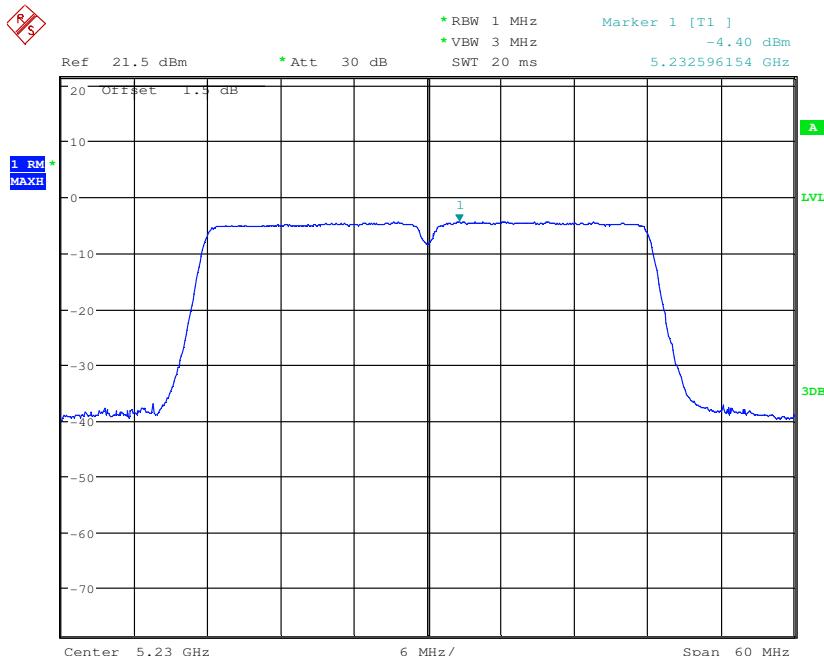


Antenna 1

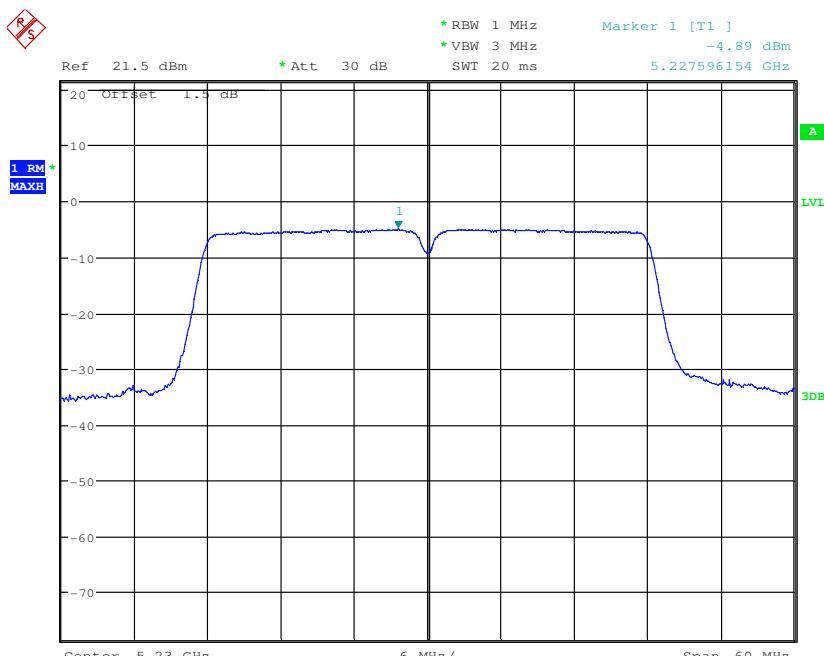


Test mode:	802.11n(HT40)	Frequency(MHz):	5230
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Antenna 0

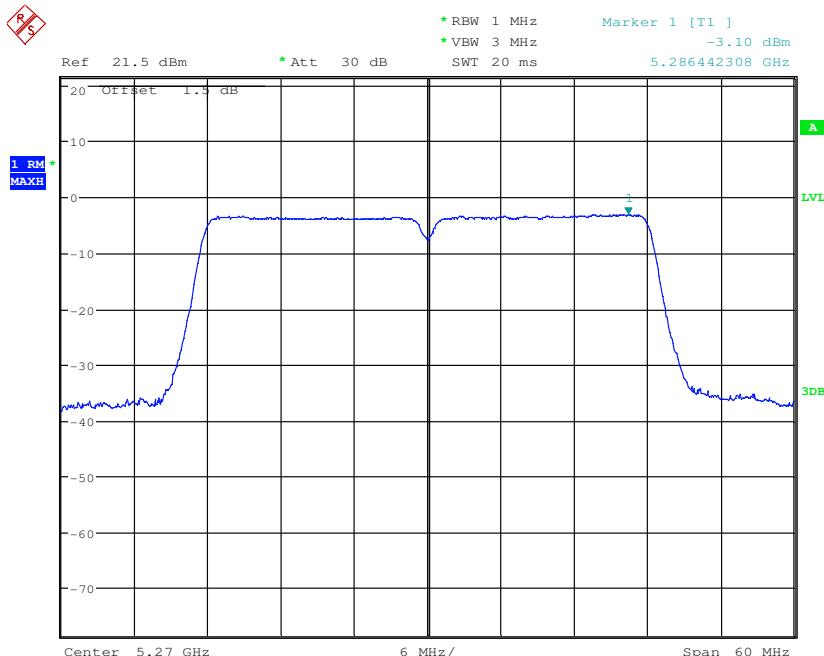


Antenna 1

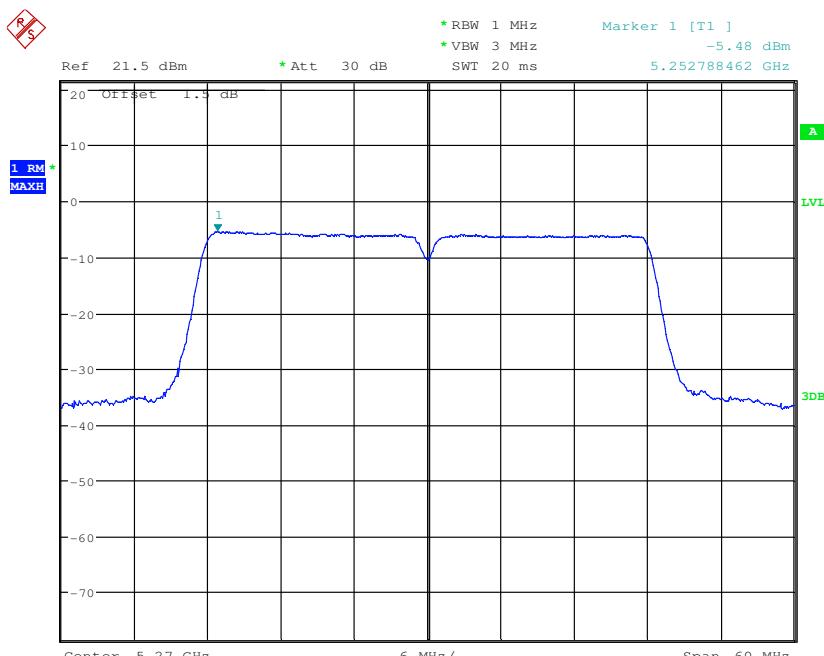


Test mode:	802.11n(HT40)	Frequency(MHz):	5270
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Antenna 0

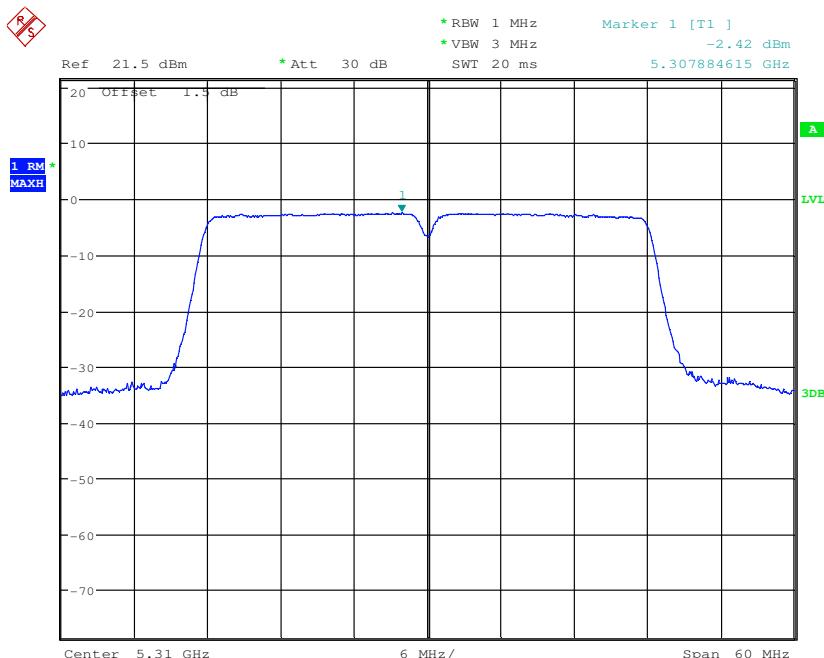


Antenna 1

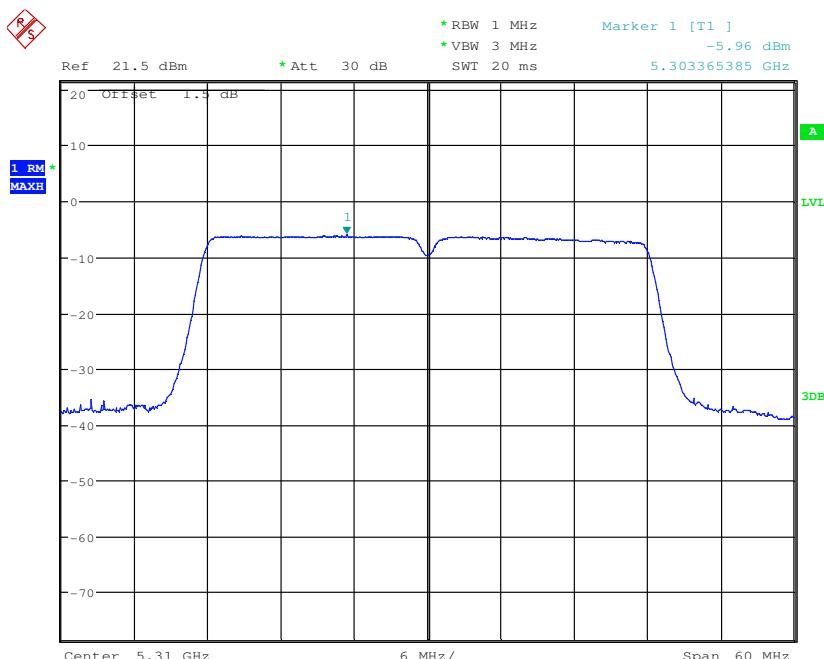


Test mode:	802.11n(HT40)	Frequency(MHz):	5310
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Antenna 0

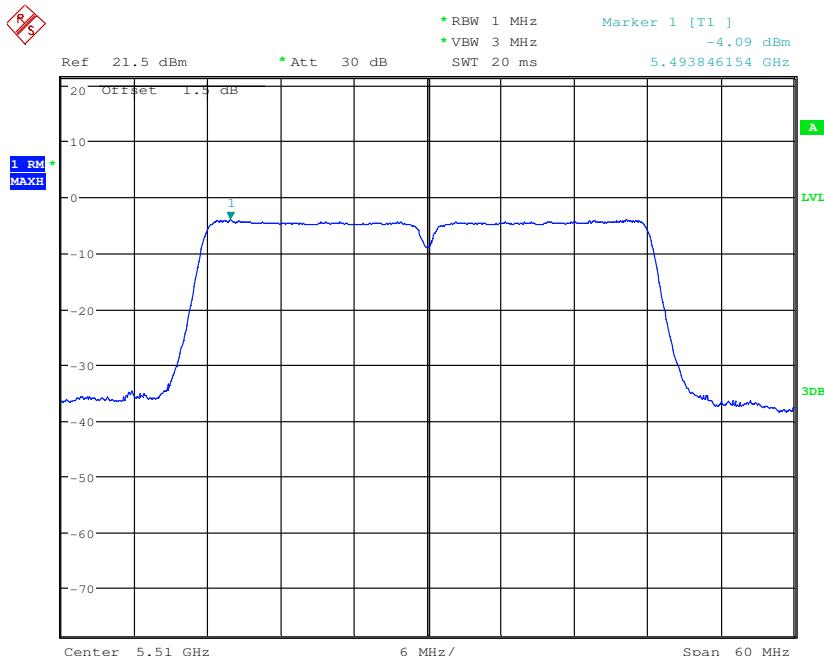


Antenna 1

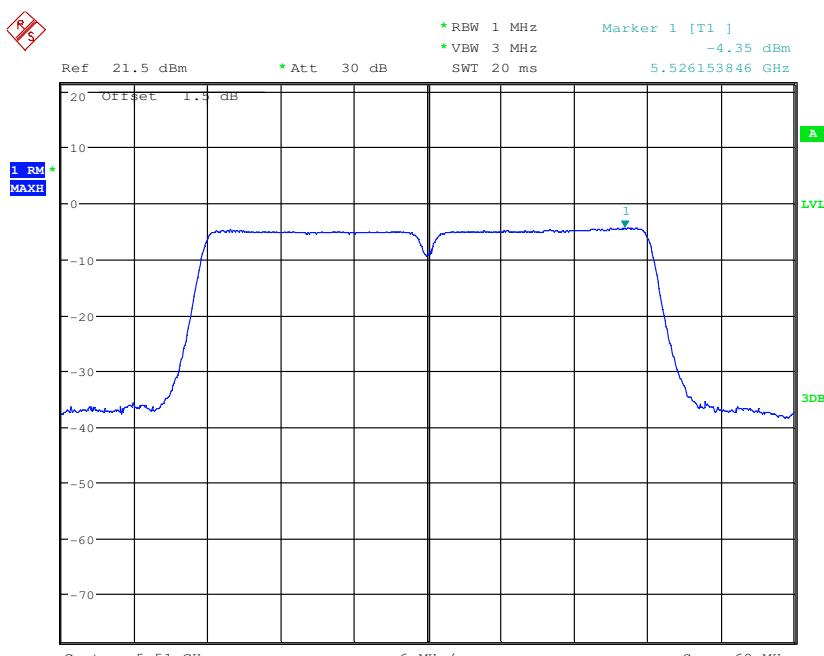


Test mode:	802.11n(HT40)	Frequency(MHz):	5510
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Antenna 0

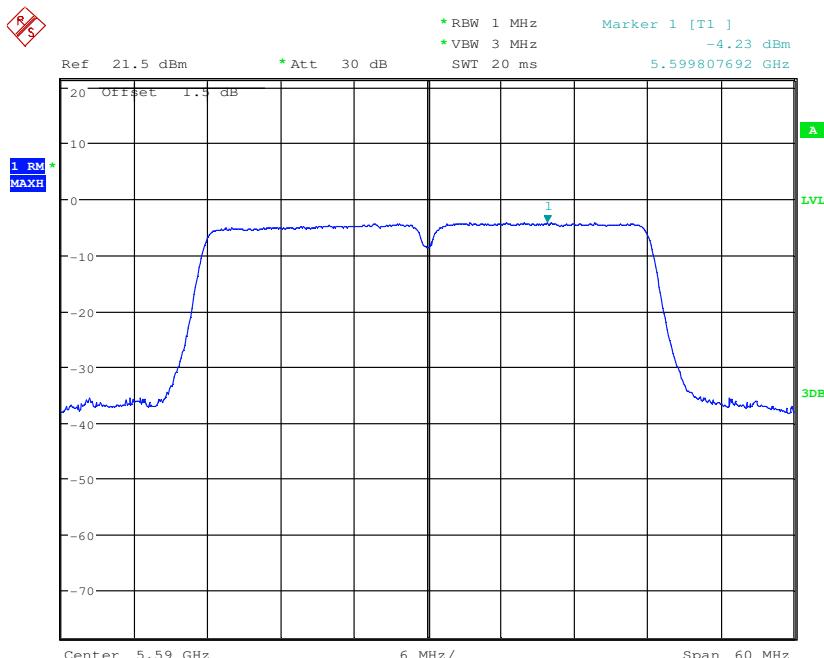


Antenna 1

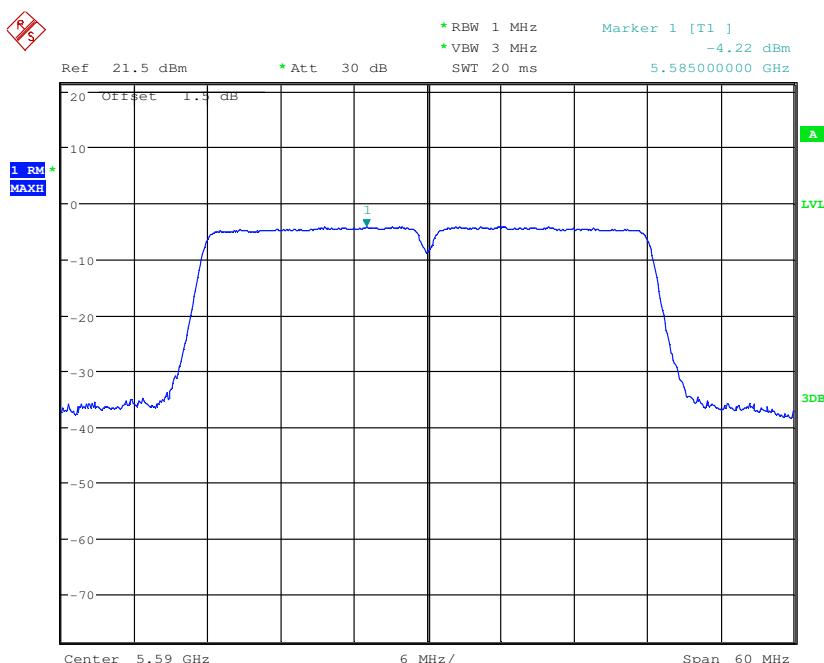


Test mode:	802.11n(HT40)	Frequency(MHz):	5590
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Antenna 0

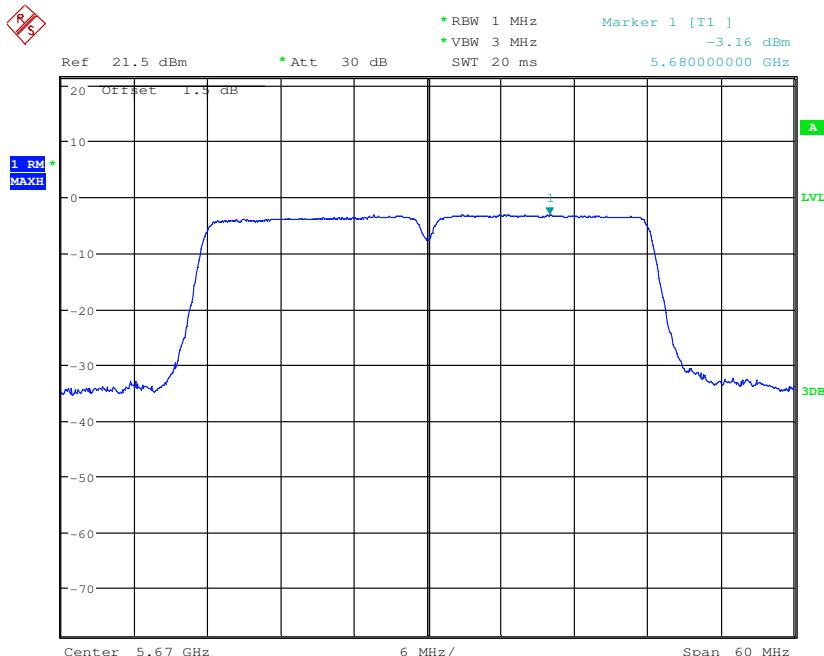


Antenna 1

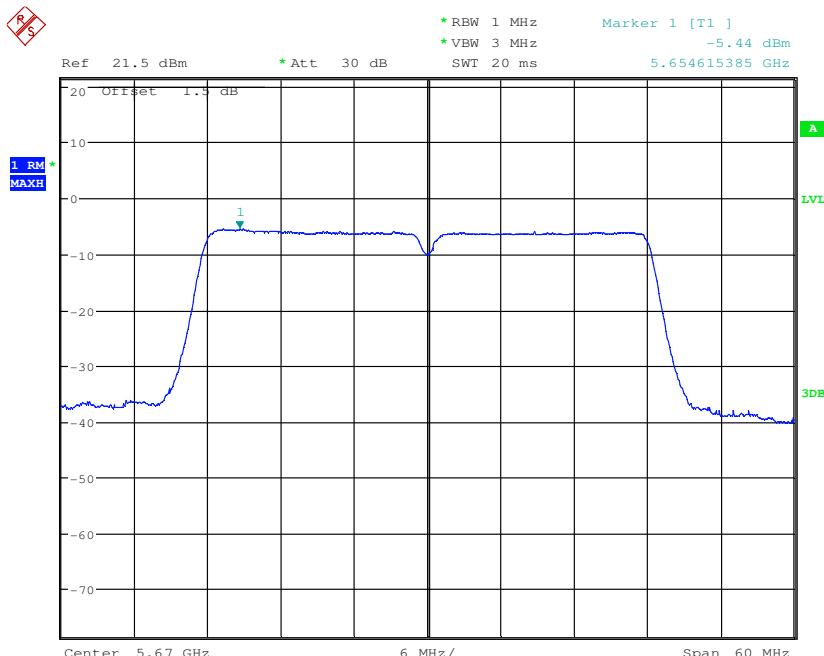


Test mode:	802.11n(HT40)	Frequency(MHz):	5670
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Antenna 0

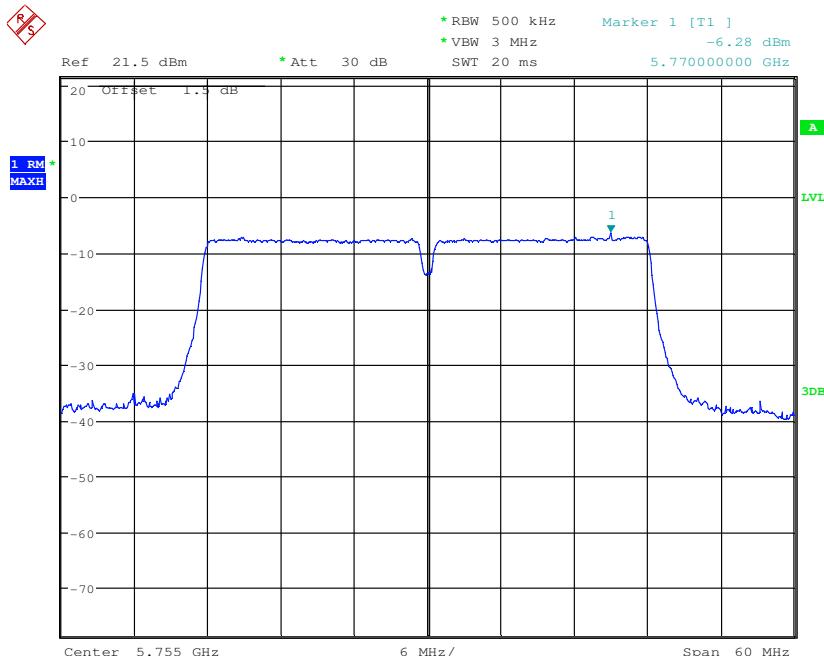


Antenna 1

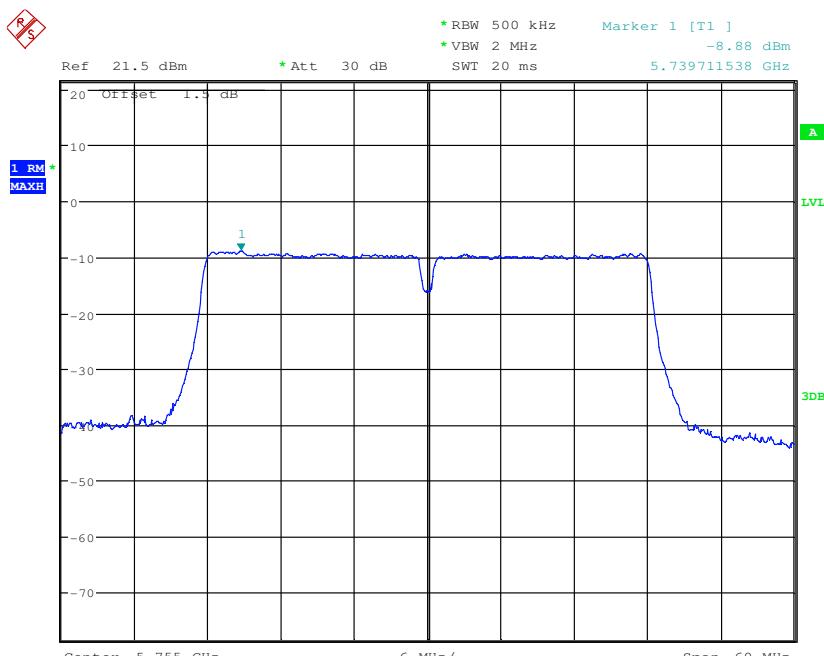


Test mode:	802.11n(HT40)	Frequency(MHz):	5755
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Antenna 0

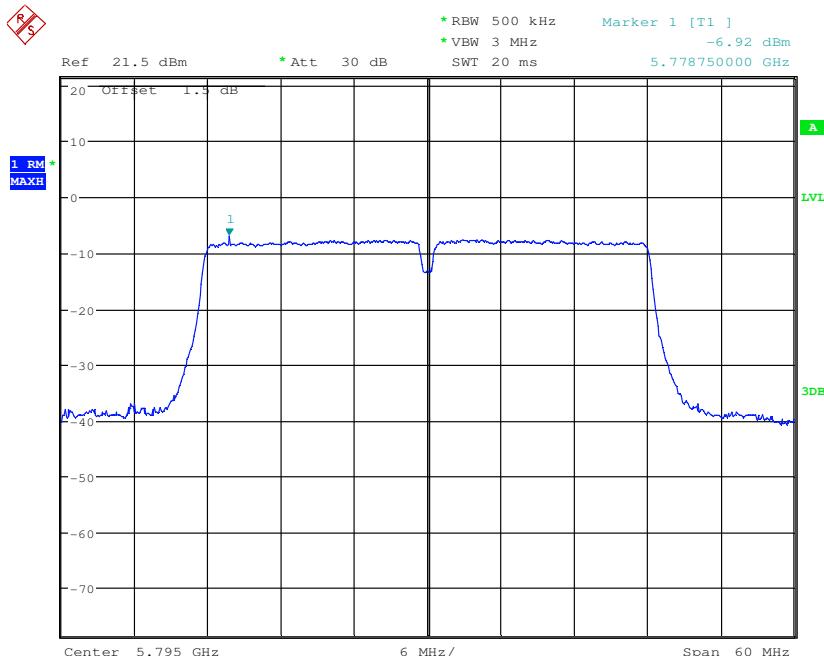


Antenna 1

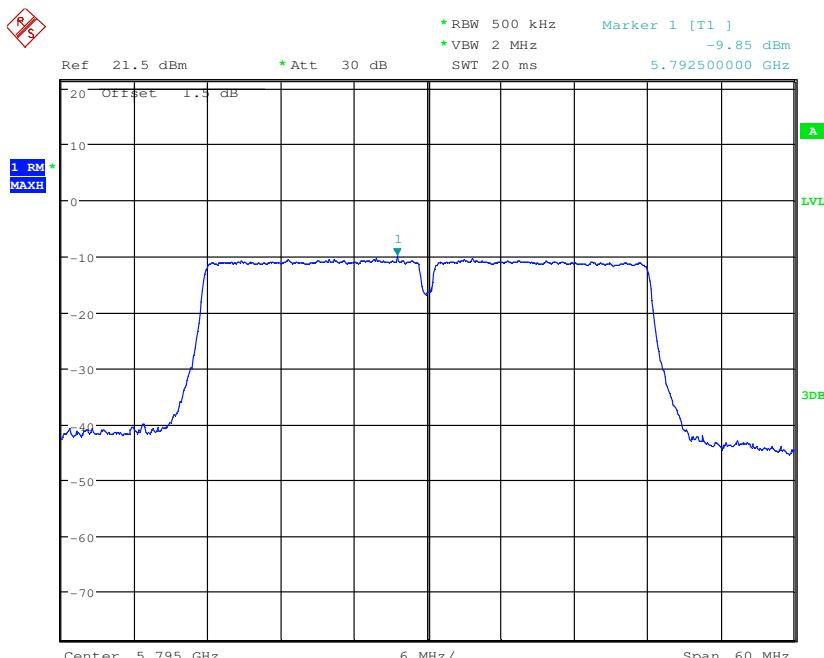


Test mode:	802.11n(HT40)	Frequency(MHz):	5795
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Antenna 0



Antenna 1



6.7 Radiated Spurious Emissions

Test Requirement:	47 CFR Part 15 Section 15.407(b)
Test Method:	ANSI C63.10: 2013
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)
Test Setup:	

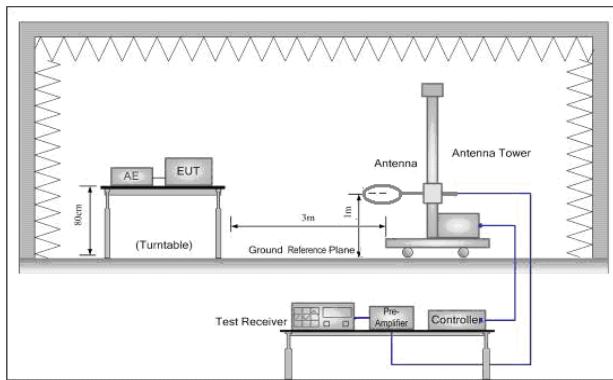


Figure 1. 30MHz to 1GHz

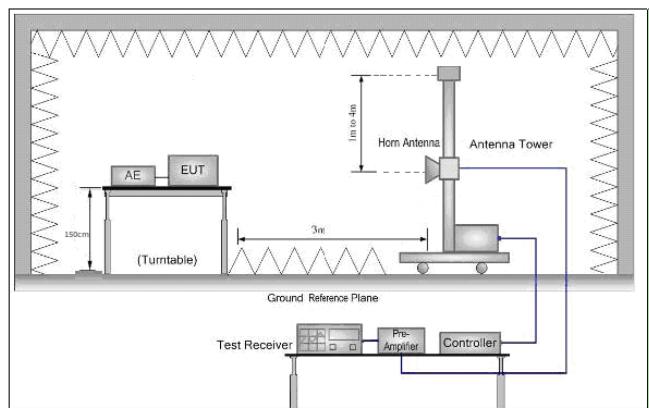


Figure 2. Above 1 GHz

Test Procedure:	<ol style="list-style-type: none"> For below 1GHz test, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. For above 1GHz test, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters (for the test frequency of below 30MHz, the antenna was tuned to height 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet. Test the EUT in the lowest channel, the middle channel, the Highest channel. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.



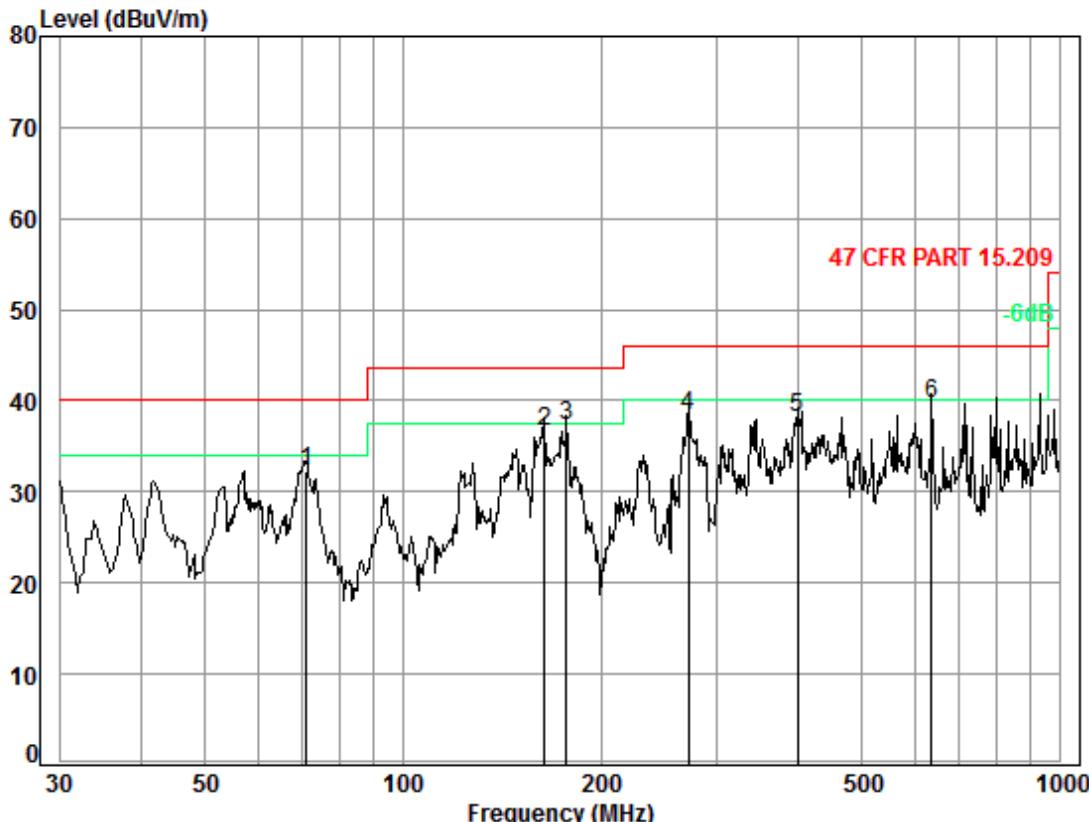
**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 134 of 193

Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40). For below 1GHz, through Pre-scan, find the 1Mbps of rate of 802.11a at lowest channel is the worst case. Only the worst case is recorded in the report. Pre-scan was performed at Antenna 0 and Antenna 1, no worst case was found. Only the test data of Antenna 0 was shown in this report.
Instruments Used:	Refer to section 5.10 for details.
Test Results:	Pass

6.7.1 Radiated emission below 1GHz

30MHz~1GHz (QP)		
Test mode:	Transmitting mode	Vertical



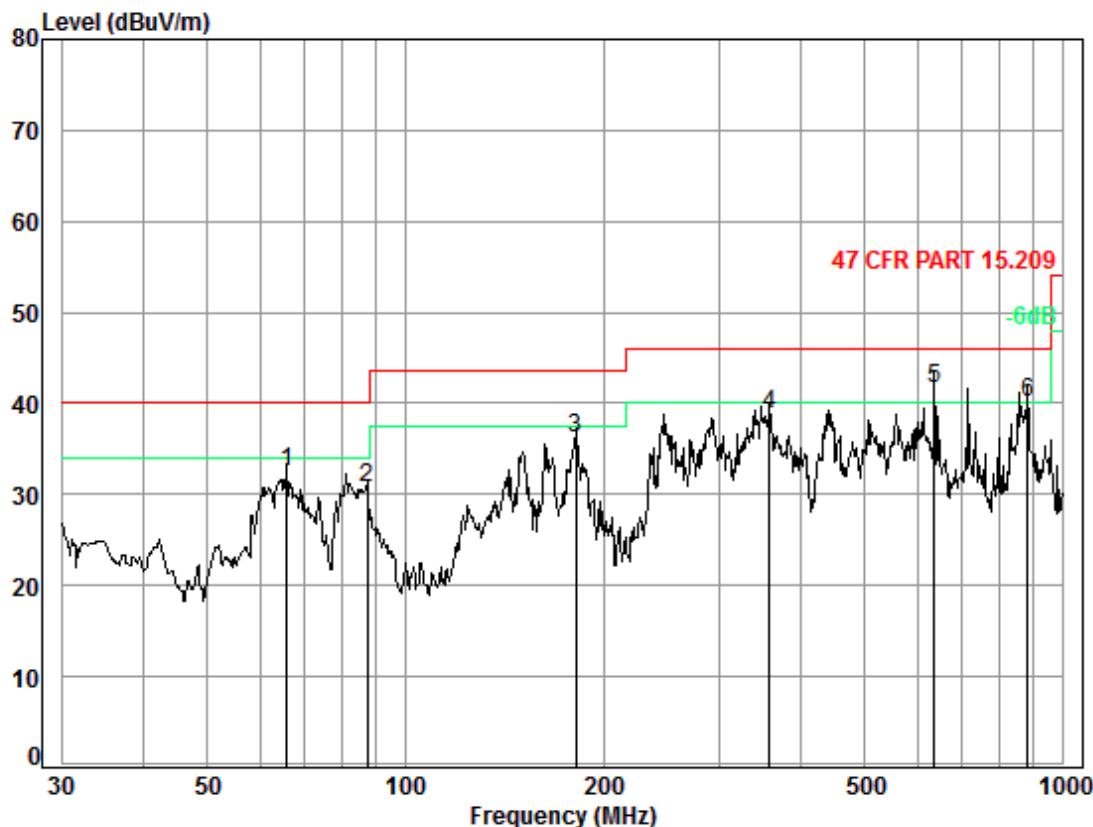
Condition: 47 CFR PART 15.209 3m 3142C Vertical

Job No. : 4373CR

Test mode: TX

Freq	Cable	Ant	Preamp	Read	Limit	Over	Over	
	Loss	Factor	Factor	Level				
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	71.27	0.85	7.00	27.24	51.63	32.24	40.00	-7.76
2	164.06	1.34	9.56	26.84	52.54	36.60	43.50	-6.90
3	177.27	1.37	9.79	26.78	52.98	37.36	43.50	-6.14
4	271.94	1.78	12.74	26.47	50.31	38.36	46.00	-7.64
5	399.10	2.20	16.29	27.13	46.78	38.14	46.00	-7.86
6	637.60	2.78	20.55	27.49	43.90	39.74	46.00	-6.26

Test mode:	Transmitting mode	Horizontal
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Condition: 47 CFR PART 15.209 3m 3142C Horizontal

Job No. : 4373CR

Test mode: TX

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	65.96	0.80	7.02	27.25	51.81	32.38	40.00	-7.62
2	87.30	1.10	8.43	27.22	48.35	30.66	40.00	-9.34
3	181.24	1.37	9.92	26.77	51.74	36.26	43.50	-7.24
4	357.29	2.08	14.51	26.85	49.13	38.87	46.00	-7.13
5	637.60	2.78	20.55	27.49	45.72	41.56	46.00	-4.44
6	885.38	3.54	23.08	26.85	40.24	40.01	46.00	-5.99



6.7.2 Transmitter emission above 1GHz

Test plot as follows:

Test mode:		802.11a		Frequency(MHz):		5180		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3449.984	7.06	32.84	38.72	47.57	48.75	74	-25.25	Vertical		
4661.723	6.10	34.62	39.19	48.81	50.34	74	-23.66	Vertical		
7838.091	9.39	35.69	39.01	44.42	50.49	74	-23.51	Vertical		
9094.878	9.82	36.24	38.25	44.88	52.69	74	-21.31	Vertical		
10360.000	9.92	37.13	37.89	42.92	52.08	74	-21.92	Vertical		
15540.000	12.97	39.38	41.17	41.10	52.28	74	-21.72	Vertical		
3481.030	7.01	32.87	38.73	47.54	48.69	74	-25.31	Horizontal		
4805.903	6.42	34.71	39.24	48.11	50.00	74	-24.00	Horizontal		
7852.148	9.39	35.70	39.01	44.39	50.47	74	-23.53	Horizontal		
9376.170	9.98	36.89	38.08	43.46	52.25	74	-21.75	Horizontal		
10360.000	9.92	37.13	37.89	43.10	52.26	74	-21.74	Horizontal		
15540.000	12.97	39.38	41.17	41.08	52.26	74	-21.74	Horizontal		

Test mode:		802.11a		Frequency(MHz):		5200		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3413.093	7.13	32.79	38.70	46.99	48.21	74	-25.79	Vertical		
4603.619	5.97	34.58	39.17	48.26	49.64	74	-24.36	Vertical		
7824.060	9.38	35.68	39.01	45.24	51.29	74	-22.71	Vertical		
9511.536	10.04	37.14	37.99	44.01	53.20	74	-20.8	Vertical		
10400.000	9.94	37.02	37.92	43.28	52.32	74	-21.68	Vertical		
15600.000	12.97	39.50	41.19	41.56	52.84	74	-21.16	Vertical		
3506.069	6.97	32.90	38.74	46.93	48.06	74	-25.94	Horizontal		
4788.712	6.39	34.69	39.23	47.88	49.73	74	-24.27	Horizontal		
7824.060	9.38	35.68	39.01	45.03	51.08	74	-22.92	Horizontal		
9160.296	9.85	36.41	38.21	42.28	50.33	74	-23.67	Horizontal		
10400.000	9.94	37.02	37.92	43.38	52.42	74	-21.58	Horizontal		
15600.000	12.97	39.50	41.19	40.94	52.22	74	-21.78	Horizontal		



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 138 of 193

Test mode:		802.11a		Frequency(MHz):		5240		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)		Polarization	
3506.069	6.97	32.90	38.74	46.49	47.62	74	-26.38		Vertical	
4620.146	6.01	34.59	39.18	47.47	48.89	74	-25.11		Vertical	
7348.469	9.11	35.48	39.05	45.41	50.95	74	-23.05		Vertical	
9209.667	9.88	36.53	38.18	43.29	51.52	74	-22.48		Vertical	
10480.000	9.97	37.30	37.96	42.73	52.04	74	-21.96		Vertical	
15720.000	12.96	39.74	41.23	40.58	52.05	74	-21.95		Vertical	
3588.694	6.92	32.99	38.78	45.92	47.05	74	-26.95		Horizontal	
4603.619	5.97	34.58	39.17	46.45	47.83	74	-26.17		Horizontal	
7838.091	9.39	35.69	39.01	43.85	49.92	74	-24.08		Horizontal	
9494.509	10.05	37.11	38.00	42.48	51.64	74	-22.36		Horizontal	
10480.000	9.97	37.30	37.96	43.29	52.60	74	-21.40		Horizontal	
15720.000	12.96	39.74	41.23	40.76	52.23	74	-21.77		Horizontal	

Test mode:		802.11a		Frequency(MHz):		5260		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)		Polarization	
3419.214	7.12	32.80	38.70	46.45	47.67	74	-26.33		Vertical	
4831.806	6.48	34.73	39.25	46.10	48.06	74	-25.94		Vertical	
7521.645	9.31	35.46	39.04	43.64	49.37	74	-24.63		Vertical	
9614.342	9.98	37.34	37.93	41.86	51.25	74	-22.75		Vertical	
10520.000	9.92	37.13	37.89	43.28	52.44	74	-21.56		Vertical	
15780.000	12.97	39.38	41.17	41.52	52.70	74	-21.30		Vertical	
3563.065	6.93	32.96	38.77	46.65	47.77	74	-26.23		Horizontal	
4788.712	6.39	34.69	39.23	47.49	49.34	74	-24.66		Horizontal	
7374.850	9.15	35.45	39.05	44.99	50.54	74	-23.46		Horizontal	
9392.984	9.99	36.93	38.06	43.14	52.00	74	-22.00		Horizontal	
10360.000	9.92	37.13	37.89	43.33	52.49	74	-21.51		Horizontal	
15540.000	12.97	39.38	41.17	41.20	52.38	74	-21.62		Horizontal	

Test mode:		802.11a		Frequency(MHz):		5300	Remark:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3419.214	7.12	32.80	38.70	45.44	46.66	74	-27.34	Vertical
4720.560	6.23	34.65	39.21	46.49	48.16	74	-25.84	Vertical
7414.599	9.20	35.42	39.05	45.19	50.76	74	-23.24	Vertical
9579.950	10.00	37.26	37.95	42.31	51.62	74	-22.38	Vertical
10480.000	9.97	37.30	37.96	42.66	51.97	74	-22.03	Vertical
15720.000	12.96	39.74	41.23	41.11	52.58	74	-21.42	Vertical
3419.214	7.12	32.80	38.70	45.44	46.66	74	-27.34	Horizontal
4720.560	6.23	34.65	39.21	46.49	48.16	74	-25.84	Horizontal
7414.599	9.20	35.42	39.05	45.19	50.76	74	-23.24	Horizontal
9579.950	10.00	37.26	37.95	42.31	51.62	74	-22.38	Horizontal
10580.000	9.97	37.30	37.96	42.66	51.97	74	-22.03	Horizontal
15870.000	12.96	39.74	41.23	41.11	52.58	74	-21.42	Horizontal

Test mode:		802.11a		Frequency(MHz):		5320	Remark:	Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization
3524.966	6.96	32.92	38.75	46.23	47.36	74	-26.64	Vertical
4695.254	6.18	34.64	39.20	47.25	48.87	74	-25.13	Vertical
7824.060	9.38	35.68	39.01	45.60	51.65	74	-22.35	Vertical
9494.509	10.05	37.11	38.00	43.06	52.22	74	-21.78	Vertical
10640.000	9.94	37.02	37.92	44.21	53.25	74	-20.75	Vertical
15960.000	12.97	39.42	41.18	41.68	52.89	74	-21.11	Vertical
3524.966	6.96	32.92	38.75	46.23	47.36	74	-26.64	Horizontal
4695.254	6.18	34.64	39.20	47.25	48.87	74	-25.13	Horizontal
7824.060	9.38	35.68	39.01	45.60	51.65	74	-22.35	Horizontal
9494.509	10.05	37.11	38.00	43.06	52.22	74	-21.78	Horizontal
10640.000	9.94	37.02	37.92	44.21	53.25	74	-20.75	Horizontal
15960.000	12.97	39.42	41.18	41.68	52.89	74	-21.11	Horizontal





SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 140 of 193

Test mode:		802.11a		Frequency(MHz):		5500	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3449.984	7.06	32.84	38.72	46.86	48.04	74	-25.96	Vertical	
4805.903	6.42	34.71	39.24	46.60	48.49	74	-25.51	Vertical	
7698.902	9.35	35.57	39.02	46.61	52.51	74	-21.49	Vertical	
9545.682	10.02	37.20	37.97	43.26	52.51	74	-21.49	Vertical	
11000.000	10.53	38.52	38.61	42.84	53.28	74	-20.72	Vertical	
16500.000	12.98	39.32	41.13	41.86	53.03	74	-20.97	Vertical	
3468.578	7.03	32.86	38.73	47.31	48.47	74	-25.53	Horizontal	
4823.156	6.46	34.72	39.24	46.83	48.77	74	-25.23	Horizontal	
7282.930	9.02	35.55	39.06	47.02	52.53	74	-21.47	Horizontal	
9614.342	9.98	37.34	37.93	42.72	52.11	74	-21.89	Horizontal	
11100.000	10.39	38.22	38.46	42.98	53.13	74	-20.87	Horizontal	
16500.000	16.31	41.01	41.69	36.92	52.55	74	-21.45	Horizontal	

Test mode:		802.11a		Frequency(MHz):		5600	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3334.511	7.29	32.61	38.67	45.69	46.92	74	-27.08	Vertical	
4712.109	6.22	34.65	39.21	47.52	49.18	74	-24.82	Vertical	
7838.091	9.39	35.69	39.01	44.04	50.11	74	-23.89	Vertical	
9545.682	10.02	37.20	37.97	43.37	52.62	74	-21.38	Vertical	
11200.000	10.42	38.28	38.50	41.92	52.12	74	-21.88	Vertical	
16800.000	16.08	40.96	41.72	37.47	52.79	74	-21.21	Vertical	
3388.719	7.18	32.75	38.69	47.94	49.18	74	-24.82	Horizontal	
4763.041	6.33	34.68	39.22	47.69	49.48	74	-24.52	Horizontal	
7782.116	9.37	35.64	39.02	46.79	52.78	74	-21.22	Horizontal	
9460.546	10.03	37.05	38.02	43.81	52.87	74	-21.13	Horizontal	
11200.000	10.42	38.28	38.50	42.23	52.43	74	-21.57	Horizontal	
16800.000	16.08	40.96	41.72	38.39	53.71	74	-20.29	Horizontal	



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 141 of 193

Test mode:		802.11a		Frequency(MHz):		5700		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3334.511	7.29	32.61	38.67	47.07	48.30	74	-25.70	Vertical		
4763.041	6.33	34.68	39.22	47.59	49.38	74	-24.62	Vertical		
7838.091	9.39	35.69	39.01	44.42	50.49	74	-23.51	Vertical		
9309.210	9.94	36.75	38.12	41.80	50.37	74	-23.63	Vertical		
11400.000	10.46	38.35	38.54	42.31	52.58	74	-21.42	Vertical		
17100.000	15.86	40.91	41.75	37.57	52.59	74	-21.41	Vertical		
3506.069	6.97	32.90	38.74	47.56	48.69	74	-25.31	Horizontal		
4814.522	6.44	34.71	39.24	48.36	50.27	74	-23.73	Horizontal		
7838.091	9.39	35.69	39.01	45.30	51.37	74	-22.63	Horizontal		
9309.210	9.94	36.75	38.12	43.42	51.99	74	-22.01	Horizontal		
11400.000	10.46	38.35	38.54	40.92	51.19	74	-22.81	Horizontal		
17100.000	15.86	40.91	41.75	37.19	52.21	74	-21.79	Horizontal		

Test mode:		802.11a		Frequency(MHz):		5745		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3316.635	7.32	32.56	38.66	47.11	48.33	74	-25.67	Vertical		
4578.940	5.91	34.55	39.16	47.34	48.64	74	-25.36	Vertical		
7575.747	9.33	35.47	39.03	44.81	50.58	74	-23.42	Vertical		
9127.528	9.84	36.33	38.23	44.89	52.83	74	-21.17	Vertical		
11490.000	10.39	38.22	38.46	41.93	52.08	74	-21.92	Vertical		
17235.000	16.31	41.01	41.69	36.97	52.60	74	-21.40	Vertical		
3512.356	6.96	32.91	38.75	47.79	48.91	74	-25.09	Horizontal		
4823.156	6.46	34.72	39.24	48.61	50.55	74	-23.45	Horizontal		
7810.054	9.38	35.67	39.02	46.79	52.82	74	-21.18	Horizontal		
9392.984	9.99	36.93	38.06	43.54	52.40	74	-21.60	Horizontal		
11490.000	10.39	38.22	38.46	41.89	52.04	74	-21.96	Horizontal		
17235.000	16.31	41.01	41.69	36.45	52.08	74	-21.92	Horizontal		



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 142 of 193

Test mode:		802.11a		Frequency(MHz):		5785	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3939.129	6.72	33.40	38.93	47.02	48.21	74	-25.79	Vertical	
4797.300	6.40	34.70	39.24	48.01	49.87	74	-24.13	Vertical	
7427.896	9.22	35.43	39.05	46.35	51.95	74	-22.05	Vertical	
9226.184	9.89	36.57	38.17	43.16	51.45	74	-22.55	Vertical	
11570.000	10.42	38.28	38.50	42.78	52.98	74	-21.02	Vertical	
17355.000	16.08	40.96	41.72	38.62	53.94	74	-20.06	Vertical	
3462.369	7.04	32.85	38.72	48.30	49.47	74	-24.53	Horizontal	
4720.560	6.23	34.65	39.21	48.78	50.45	74	-23.55	Horizontal	
7441.216	9.23	35.43	39.05	44.42	50.03	74	-23.97	Horizontal	
9292.546	9.93	36.71	38.13	42.62	51.13	74	-22.87	Horizontal	
11570.000	10.42	38.28	38.50	41.83	52.03	74	-21.97	Horizontal	
17355.000	16.08	40.96	41.72	37.34	52.66	74	-21.34	Horizontal	

Test mode:		802.11a		Frequency(MHz):		5825	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3487.273	6.99	32.88	38.74	46.62	47.75	74	-26.25	Vertical	
4661.723	6.10	34.62	39.19	48.08	49.61	74	-24.39	Vertical	
7256.878	8.99	35.58	39.06	47.17	52.68	74	-21.32	Vertical	
9392.984	9.99	36.93	38.06	42.60	51.46	74	-22.54	Vertical	
11650.000	10.46	38.35	38.54	42.25	52.52	74	-21.48	Vertical	
17475.000	15.86	40.91	41.75	37.23	52.25	74	-21.75	Vertical	
3726.298	6.84	33.10	38.84	46.69	47.79	74	-26.21	Horizontal	
4771.583	6.35	34.68	39.23	47.18	48.98	74	-25.02	Horizontal	
7671.363	9.35	35.54	39.03	45.49	51.35	74	-22.65	Horizontal	
9226.184	9.89	36.57	38.17	42.90	51.19	74	-22.81	Horizontal	
11650.000	10.46	38.35	38.54	42.08	52.35	74	-21.65	Horizontal	
17475.000	15.86	40.91	41.75	37.28	52.30	74	-21.70	Horizontal	



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303

Page: 143 of 193

Test mode:		802.11n(HT20)		Frequency(MHz):		5180		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)		Polarization	
3759.831	6.82	33.12	38.85	48.53	49.62	74	-24.38		Vertical	
4945.674	6.72	34.85	39.28	49.24	51.53	74	-22.47		Vertical	
7852.148	9.39	35.70	39.01	43.74	49.82	74	-24.18		Vertical	
9460.546	10.03	37.05	38.02	44.03	53.09	74	-20.91		Vertical	
10360.000	9.92	37.13	37.89	43.32	52.48	74	-21.52		Vertical	
15540.000	12.97	39.38	41.17	41.16	52.34	74	-21.66		Vertical	
3449.984	7.06	32.84	38.72	46.49	47.67	74	-26.33		Horizontal	
4670.083	6.12	34.62	39.19	47.38	48.93	74	-25.07		Horizontal	
7282.930	9.02	35.55	39.06	46.80	52.31	74	-21.69		Horizontal	
9545.682	10.02	37.20	37.97	43.07	52.32	74	-21.68		Horizontal	
10360.000	9.93	37.07	37.90	43.87	52.97	74	-21.03		Horizontal	
15540.000	12.97	39.44	41.18	40.95	52.18	74	-21.82		Horizontal	

Test mode:		802.11n(HT20)		Frequency(MHz):		5200		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)		Polarization	
3499.792	6.97	32.89	38.74	46.87	47.99	74	-26.01		Vertical	
4620.146	6.01	34.59	39.18	47.78	49.20	74	-24.80		Vertical	
7838.091	9.39	35.69	39.01	45.55	51.62	74	-22.38		Vertical	
9511.536	10.04	37.14	37.99	43.76	52.95	74	-21.05		Vertical	
10400.000	9.94	37.02	37.92	44.12	53.16	74	-20.84		Vertical	
15600.000	12.97	39.50	41.19	41.50	52.78	74	-21.22		Vertical	
3746.382	6.83	33.11	38.85	48.24	49.33	74	-24.67		Horizontal	
4611.875	5.99	34.59	39.17	48.09	49.50	74	-24.50		Horizontal	
7852.148	9.39	35.70	39.01	44.47	50.55	74	-23.45		Horizontal	
9477.513	10.04	37.08	38.01	43.87	52.98	74	-21.02		Horizontal	
10400.000	9.94	37.02	37.92	43.91	52.95	74	-21.05		Horizontal	
15600.000	12.97	39.50	41.19	41.04	52.32	74	-21.68		Horizontal	



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 144 of 193

Test mode:		802.11n(HT20)		Frequency(MHz):		5240		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3524.966	6.96	32.92	38.75	46.89	48.02	74	-25.98	Vertical		
4670.083	6.12	34.62	39.19	47.43	48.98	74	-25.02	Vertical		
7796.073	9.38	35.66	39.02	45.91	51.93	74	-22.07	Vertical		
9460.546	10.03	37.05	38.02	43.57	52.63	74	-21.37	Vertical		
10480.000	9.97	37.30	37.96	42.98	52.29	74	-21.71	Vertical		
15720.000	12.96	39.74	41.23	41.15	52.62	74	-21.38	Vertical		
3537.620	6.95	32.93	38.76	47.80	48.92	74	-25.08	Horizontal		
4620.146	6.01	34.59	39.18	48.32	49.74	74	-24.26	Horizontal		
7335.314	9.09	35.49	39.06	47.28	52.80	74	-21.20	Horizontal		
9460.546	10.03	37.05	38.02	43.81	52.87	74	-21.13	Horizontal		
10480.000	9.97	37.30	37.96	43.41	52.72	74	-21.28	Horizontal		
15720.000	12.96	39.74	41.23	41.44	52.91	74	-21.09	Horizontal		

Test mode:		802.11n(HT20)		Frequency(MHz):		5260		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3298.855	7.36	32.52	38.65	46.13	47.36	74	-26.64	Vertical		
3960.360	6.71	33.43	38.93	46.47	47.68	74	-26.32	Vertical		
4771.583	6.35	34.68	39.23	47.54	49.34	74	-24.66	Vertical		
8124.064	9.47	35.83	38.91	44.01	50.40	74	-23.60	Vertical		
10520.000	9.96	37.23	37.95	42.80	52.04	74	-21.96	Vertical		
15780.000	12.96	39.68	41.22	41.72	53.14	74	-20.86	Vertical		
3310.698	7.33	32.55	38.65	45.87	47.10	74	-26.90	Horizontal		
3918.012	6.73	33.36	38.92	46.19	47.36	74	-26.64	Horizontal		
4578.940	5.91	34.55	39.16	46.17	47.47	74	-26.53	Horizontal		
8211.874	9.51	35.85	38.85	42.27	48.78	74	-25.22	Horizontal		
10520.000	9.93	37.07	37.90	43.25	52.35	74	-21.65	Horizontal		
15780.000	12.97	39.44	41.18	42.26	53.49	74	-20.51	Horizontal		



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303

Page: 145 of 193

Test mode:		802.11n(HT20)		Frequency(MHz):		5300		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3292.950	7.37	32.50	38.65	45.08	46.30	74	-27.70	Vertical		
3620.989	6.90	33.02	38.79	44.91	46.04	74	-27.96	Vertical		
4254.620	6.19	34.06	39.05	45.47	46.67	74	-27.33	Vertical		
4840.471	6.50	34.74	39.25	46.14	48.13	74	-25.87	Vertical		
10580.000	9.93	37.07	37.90	41.41	50.51	74	-23.49	Vertical		
15870.000	12.97	39.44	41.18	40.28	51.51	74	-22.49	Vertical		
3370.552	7.22	32.70	38.68	46.81	48.05	74	-25.95	Horizontal		
4164.117	6.36	33.90	39.01	46.46	47.71	74	-26.29	Horizontal		
5135.310	6.96	34.87	39.28	48.02	50.57	74	-23.43	Horizontal		
8665.363	9.67	35.93	38.53	40.58	47.65	74	-26.35	Horizontal		
10580.000	9.96	37.23	37.95	43.29	52.53	74	-21.47	Horizontal		
15870.000	12.96	39.68	41.22	41.90	53.32	74	-20.68	Horizontal		

Test mode:		802.11n(HT20)		Frequency(MHz):		5320		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3666.690	6.87	33.05	38.81	43.97	45.08	74	-28.92	Vertical		
4831.806	6.48	34.73	39.25	45.10	47.06	74	-26.94	Vertical		
7754.279	9.37	35.62	39.02	43.84	49.81	74	-24.19	Vertical		
9562.801	10.01	37.23	37.96	43.15	52.43	74	-21.57	Vertical		
10640.000	10.39	38.23	38.47	43.43	53.58	74	-20.42	Vertical		
15960.000	16.25	40.99	41.69	37.97	53.52	74	-20.48	Vertical		
3493.527	6.98	32.88	38.74	46.14	47.26	74	-26.74	Horizontal		
4720.560	6.23	34.65	39.21	47.14	48.81	74	-25.19	Horizontal		
7685.120	9.35	35.56	39.03	46.42	52.30	74	-21.70	Horizontal		
9545.682	10.02	37.20	37.97	43.10	52.35	74	-21.65	Horizontal		
10640.000	10.39	38.23	38.47	41.12	51.27	74	-22.73	Horizontal		
15960.000	16.25	40.99	41.69	36.69	52.24	74	-21.76	Horizontal		



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 146 of 193

Test mode:		802.11n(HT20)		Frequency(MHz):		5500	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3269.434	7.42	32.44	38.63	47.30	48.53	74	-25.47	Vertical	
4628.432	6.03	34.60	39.18	48.67	50.12	74	-23.88	Vertical	
7838.091	9.39	35.69	39.01	45.01	51.08	74	-22.92	Vertical	
9545.682	10.02	37.20	37.97	44.09	53.34	74	-20.66	Vertical	
11000.000	10.43	38.29	38.51	43.11	53.32	74	-20.68	Vertical	
16500.000	16.03	40.95	41.73	37.18	52.43	74	-21.57	Vertical	
3449.984	7.06	32.84	38.72	46.49	47.67	74	-26.33	Horizontal	
4670.083	6.12	34.62	39.19	47.38	48.93	74	-25.07	Horizontal	
7295.991	9.04	35.53	39.06	46.57	52.08	74	-21.92	Horizontal	
9259.305	9.91	36.64	38.15	42.90	51.30	74	-22.70	Horizontal	
11000.000	10.43	38.29	38.51	42.30	52.51	74	-21.49	Horizontal	
16500.000	16.03	40.95	41.73	37.62	52.87	74	-21.13	Horizontal	

Test mode:		802.11n(HT20)		Frequency(MHz):		5600	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3269.434	7.42	32.44	38.63	45.35	46.58	74	-27.42	Vertical	
3932.078	6.73	33.38	38.92	46.19	47.38	74	-26.62	Vertical	
4840.471	6.50	34.74	39.25	46.72	48.71	74	-25.29	Vertical	
8182.499	9.50	35.85	38.87	41.96	48.44	74	-25.56	Vertical	
10420.000	9.95	37.09	37.93	42.18	51.29	74	-22.71	Vertical	
15630.000	12.97	39.56	41.20	42.22	53.55	74	-20.45	Vertical	
3524.966	6.96	32.92	38.75	47.36	48.49	74	-25.51	Horizontal	
4354.885	6.00	34.20	39.08	48.17	49.29	74	-24.71	Horizontal	
5135.310	6.96	34.87	39.28	47.93	50.48	74	-23.52	Horizontal	
8109.521	9.47	35.83	38.92	43.31	49.69	74	-24.31	Horizontal	
10420.000	9.95	37.09	37.93	43.19	52.30	74	-21.70	Horizontal	
15630.000	12.97	39.56	41.20	41.06	52.39	74	-21.61	Horizontal	



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 147 of 193

Test mode:		802.11n(HT20)		Frequency(MHz):		5700		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3346.482	7.26	32.64	38.67	45.89	47.12	74	-26.88	Vertical		
4678.458	6.14	34.63	39.20	47.48	49.05	74	-24.95	Vertical		
7282.930	9.02	35.55	39.06	47.49	53.00	74	-21.00	Vertical		
9477.513	10.04	37.08	38.01	42.88	51.99	74	-22.01	Vertical		
11400.000	7.73	35.85	39.21	48.61	52.98	74	-21.02	Vertical		
17100.000	16.14	40.97	41.71	37.33	52.73	74	-21.27	Vertical		
3518.655	6.96	32.91	38.75	46.10	47.22	74	-26.78	Horizontal		
4703.674	6.20	34.64	39.20	46.86	48.50	74	-25.50	Horizontal		
7361.648	9.13	35.46	39.05	45.13	50.67	74	-23.33	Horizontal		
9409.829	10.00	36.96	38.05	42.62	51.53	74	-22.47	Horizontal		
11400.000	10.41	38.26	38.49	42.95	53.13	74	-20.87	Horizontal		
17100.000	16.14	40.97	41.71	37.46	52.86	74	-21.14	Horizontal		

Test mode:		802.11n(HT20)		Frequency(MHz):		5745		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3340.491	7.28	32.63	38.67	47.58	48.82	74	-25.18	Vertical		
4780.140	6.37	34.69	39.23	48.00	49.83	74	-24.17	Vertical		
7824.060	9.38	35.68	39.01	45.24	51.29	74	-22.71	Vertical		
9477.513	10.04	37.08	38.01	43.66	52.77	74	-21.23	Vertical		
11490.000	10.39	38.22	38.46	42.23	52.38	74	-21.62	Vertical		
17235.000	16.31	41.01	41.69	37.82	53.45	74	-20.55	Vertical		
3352.483	7.25	32.66	38.67	47.04	48.28	74	-25.72	Horizontal		
4645.047	6.06	34.61	39.18	48.47	49.96	74	-24.04	Horizontal		
6587.637	8.09	35.73	39.12	48.98	53.68	74	-20.32	Horizontal		
9460.546	10.03	37.05	38.02	43.77	52.83	74	-21.17	Horizontal		
11490.000	10.39	38.22	38.46	42.51	52.66	74	-21.34	Horizontal		
17235.000	16.31	41.01	41.69	37.34	52.97	74	-21.03	Horizontal		



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 148 of 193

Test mode:		802.11n(HT20)		Frequency(MHz):		5785	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3382.653	7.19	32.74	38.69	46.21	47.45	74	-26.55	Vertical	
4645.047	6.06	34.61	39.18	47.56	49.05	74	-24.95	Vertical	
7322.183	9.08	35.50	39.06	46.40	51.92	74	-22.08	Vertical	
9359.385	9.97	36.85	38.09	42.40	51.13	74	-22.87	Vertical	
11570.000	10.42	38.28	38.50	42.08	52.28	74	-21.72	Vertical	
17355.000	16.08	40.96	41.72	37.51	52.83	74	-21.17	Vertical	
3394.796	7.17	32.77	38.69	46.52	47.77	74	-26.23	Horizontal	
4754.514	6.31	34.67	39.22	46.49	48.25	74	-25.75	Horizontal	
7852.148	9.39	35.70	39.01	43.37	49.45	74	-24.55	Horizontal	
9443.610	10.02	37.02	38.03	42.34	51.35	74	-22.65	Horizontal	
11570.000	10.42	38.28	38.50	40.63	50.83	74	-23.17	Horizontal	
17355.000	16.08	40.96	41.72	37.12	52.44	74	-21.56	Horizontal	

Test mode:		802.11n(HT20)		Frequency(MHz):		5825	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3588.694	6.92	32.99	38.78	45.08	46.21	74	-27.79	Vertical	
4513.773	5.76	34.44	39.14	46.88	47.94	74	-26.06	Vertical	
7852.148	9.39	35.70	39.01	43.55	49.63	74	-24.37	Vertical	
9409.829	10.00	36.96	38.05	42.31	51.22	74	-22.78	Vertical	
11650.000	10.46	38.35	38.54	42.34	52.61	74	-21.39	Vertical	
17475.000	15.86	40.91	41.75	37.20	52.22	74	-21.78	Vertical	
3406.983	7.15	32.79	38.70	46.64	47.88	74	-26.12	Horizontal	
4771.583	6.35	34.68	39.23	47.27	49.07	74	-24.93	Horizontal	
7374.850	9.15	35.45	39.05	44.99	50.54	74	-23.46	Horizontal	
9392.984	9.99	36.93	38.06	43.14	52.00	74	-22.00	Horizontal	
11650.000	10.46	38.35	38.54	42.68	52.95	74	-21.05	Horizontal	
17475.000	15.86	40.91	41.75	37.80	52.82	74	-21.18	Horizontal	

Test mode:		802.11n(HT40)		Frequency(MHz):		5190	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3413.093	7.13	32.79	38.70	48.61	49.83	74	-24.17	Vertical	
4661.723	6.10	34.62	39.19	48.88	50.41	74	-23.59	Vertical	
7740.397	9.36	35.61	39.02	47.79	53.74	74	-20.26	Vertical	
9494.509	10.05	37.11	38.00	44.10	53.26	74	-20.74	Vertical	
10380.000	9.93	37.07	37.90	43.19	52.29	74	-21.71	Vertical	
15570.000	12.97	39.44	41.18	42.08	53.31	74	-20.69	Vertical	
3773.328	6.81	33.13	38.86	48.65	49.73	74	-24.27	Horizontal	
4703.674	6.20	34.64	39.20	50.20	51.84	74	-22.16	Horizontal	
7796.073	9.38	35.66	39.02	47.15	53.17	74	-20.83	Horizontal	
9494.509	10.05	37.11	38.00	44.13	53.29	74	-20.71	Horizontal	
10380.000	9.93	37.07	37.90	43.01	52.11	74	-21.89	Horizontal	
15570.000	12.97	39.44	41.18	40.99	52.22	74	-21.78	Horizontal	

Test mode:		802.11n(HT40)		Frequency(MHz):		5230	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3370.552	7.22	32.70	38.68	47.52	48.76	74	-25.24	Vertical	
3918.012	6.73	33.36	38.92	46.82	47.99	74	-26.01	Vertical	
4840.471	6.50	34.74	39.25	46.83	48.82	74	-25.18	Vertical	
8665.363	9.67	35.93	38.53	40.32	47.39	74	-26.61	Vertical	
10420.000	9.96	37.23	37.95	43.11	52.35	74	-21.65	Vertical	
15630.000	12.96	39.68	41.22	41.00	52.42	74	-21.58	Vertical	
3334.511	7.29	32.61	38.67	47.07	48.30	74	-25.70	Horizontal	
4231.812	6.23	34.03	39.04	46.63	47.85	74	-26.15	Horizontal	
5089.509	6.92	34.88	39.29	47.30	49.81	74	-24.19	Horizontal	
8618.910	9.66	35.91	38.57	41.23	48.23	74	-25.77	Horizontal	
10420.000	9.96	37.23	37.95	43.50	52.74	74	-21.26	Horizontal	
15630.000	12.96	39.68	41.22	42.32	53.74	74	-20.26	Horizontal	





SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303

Page: 150 of 193

Test mode:		802.11n(HT40)		Frequency(MHz):		5270		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3316.635	7.32	32.56	38.66	46.57	47.79	74	-26.21	Vertical		
4216.674	6.26	34.00	39.03	47.22	48.45	74	-25.55	Vertical		
5144.519	6.97	34.86	39.28	47.55	50.10	74	-23.90	Vertical		
8680.904	9.68	35.93	38.52	40.98	48.07	74	-25.93	Vertical		
10540.000	9.95	37.09	37.93	43.36	52.47	74	-21.53	Vertical		
15810.000	12.97	39.56	41.20	41.37	52.70	74	-21.30	Vertical		
3413.093	7.13	32.79	38.70	47.72	48.94	74	-25.06	Horizontal		
4262.250	6.17	34.07	39.05	46.98	48.17	74	-25.83	Horizontal		
5116.940	6.95	34.87	39.29	46.53	49.06	74	-24.94	Horizontal		
7965.512	9.41	35.78	39.00	41.48	47.67	74	-26.33	Horizontal		
10540.000	9.93	37.07	37.90	41.38	50.48	74	-23.52	Horizontal		
15810.000	12.97	39.44	41.18	40.92	52.15	74	-21.85	Horizontal		

Test mode:		802.11n(HT40)		Frequency(MHz):		5310		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3304.771	7.35	32.53	38.65	45.52	46.75	74	-27.25	Vertical		
3918.012	6.73	33.36	38.92	46.23	47.40	74	-26.60	Vertical		
5107.780	6.94	34.87	39.29	46.54	49.06	74	-24.94	Vertical		
8649.852	9.67	35.92	38.54	39.29	46.34	74	-27.66	Vertical		
10620.000	9.95	37.09	37.93	42.80	51.91	74	-22.09	Vertical		
15930.000	12.97	39.56	41.20	41.55	52.88	74	-21.12	Vertical		
3719.627	6.84	33.09	38.84	47.99	49.08	74	-24.92	Horizontal		
4521.868	5.78	34.46	39.14	47.35	48.45	74	-25.55	Horizontal		
5399.517	7.19	34.78	39.25	48.38	51.10	74	-22.90	Horizontal		
8285.772	9.54	35.83	38.80	42.28	48.85	74	-25.15	Horizontal		
10620.000	9.93	37.07	37.90	42.09	51.19	74	-22.81	Horizontal		
15930.000	12.97	39.44	41.18	41.16	52.39	74	-21.61	Horizontal		



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 151 of 193

Test mode:		802.11n(HT40)		Frequency(MHz):		5510		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3462.369	7.04	32.85	38.72	49.14	50.31	74	-23.69	Vertical		
4919.161	6.67	34.82	39.27	48.41	50.63	74	-23.37	Vertical		
7521.645	9.31	35.46	39.04	46.34	52.07	74	-21.93	Vertical		
9477.513	10.04	37.08	38.01	44.20	53.31	74	-20.69	Vertical		
11020.000	10.39	38.23	38.47	42.13	52.28	74	-21.72	Vertical		
16530.000	16.25	40.99	41.69	37.31	52.86	74	-21.14	Vertical		
3468.578	7.03	32.86	38.73	46.80	47.96	74	-26.04	Horizontal		
4754.514	6.31	34.67	39.22	47.38	49.14	74	-24.86	Horizontal		
7824.060	9.38	35.68	39.01	45.66	51.71	74	-22.29	Horizontal		
9562.801	10.01	37.23	37.96	43.82	53.10	74	-20.90	Horizontal		
11020.000	10.39	38.23	38.47	43.02	53.17	74	-20.83	Horizontal		
16530.000	16.25	40.99	41.69	36.92	52.47	74	-21.53	Horizontal		

Test mode:		802.11n(HT40)		Frequency(MHz):		5590		Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization		
3388.719	7.18	32.75	38.69	47.42	48.66	74	-25.34	Vertical		
4763.041	6.33	34.68	39.22	47.59	49.38	74	-24.62	Vertical		
8138.634	9.48	35.83	38.90	43.89	50.30	74	-23.70	Vertical		
9494.509	10.05	37.11	38.00	43.47	52.63	74	-21.37	Vertical		
11100.000	10.43	38.29	38.51	41.91	52.12	74	-21.88	Vertical		
16650.000	16.03	40.95	41.73	37.45	52.70	74	-21.30	Vertical		
3388.719	7.18	32.75	38.69	47.42	48.66	74	-25.34	Horizontal		
4763.041	6.33	34.68	39.22	47.59	49.38	74	-24.62	Horizontal		
8138.634	9.48	35.83	38.90	43.89	50.30	74	-23.70	Horizontal		
9494.509	10.05	37.11	38.00	43.47	52.63	74	-21.37	Horizontal		
11100.000	10.43	38.29	38.51	41.91	52.12	74	-21.88	Horizontal		
16500.000	16.03	40.95	41.73	37.45	52.70	74	-21.30	Horizontal		



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM150700437303
Page: 152 of 193

Test mode:		802.11n(HT40)		Frequency(MHz):		5670	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3666.690	6.87	33.05	38.81	43.97	45.08	74	-28.92	Vertical	
4831.806	6.48	34.73	39.25	45.10	47.06	74	-26.94	Vertical	
7754.279	9.37	35.62	39.02	43.84	49.81	74	-24.19	Vertical	
9562.801	10.01	37.23	37.96	43.15	52.43	74	-21.57	Vertical	
11340.000	10.39	38.23	38.47	43.43	53.58	74	-20.42	Vertical	
17010.000	16.25	40.99	41.69	37.97	53.52	74	-20.48	Vertical	
3493.527	6.98	32.88	38.74	46.14	47.26	74	-26.74	Horizontal	
4720.560	6.23	34.65	39.21	47.14	48.81	74	-25.19	Horizontal	
7685.120	9.35	35.56	39.03	46.42	52.30	74	-21.70	Horizontal	
9545.682	10.02	37.20	37.97	43.10	52.35	74	-21.65	Horizontal	
11340.000	10.39	38.23	38.47	41.12	51.27	74	-22.73	Horizontal	
17010.000	16.25	40.99	41.69	36.69	52.24	74	-21.76	Horizontal	

Test mode:		802.11n(HT40)		Frequency(MHz):		5755	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3419.214	7.12	32.80	38.70	48.14	49.36	74	-24.64	Vertical	
4746.002	6.29	34.67	39.22	47.97	49.71	74	-24.29	Vertical	
7282.930	9.02	35.55	39.06	47.77	53.28	74	-20.72	Vertical	
9494.509	10.05	37.11	38.00	43.48	52.64	74	-21.36	Vertical	
11510.000	10.39	38.23	38.47	42.45	52.60	74	-21.40	Vertical	
17265.000	16.25	40.99	41.69	36.99	52.54	74	-21.46	Vertical	
3481.030	7.01	32.87	38.73	47.25	48.40	74	-25.60	Horizontal	
4661.723	6.10	34.62	39.19	48.88	50.41	74	-23.59	Horizontal	
8420.471	9.60	35.82	38.70	45.34	52.06	74	-21.94	Horizontal	
9275.910	9.92	36.67	38.14	42.90	51.35	74	-22.65	Horizontal	
11510.000	10.39	38.23	38.47	41.87	52.02	74	-21.98	Horizontal	
17265.000	16.25	40.99	41.69	36.87	52.42	74	-21.58	Horizontal	



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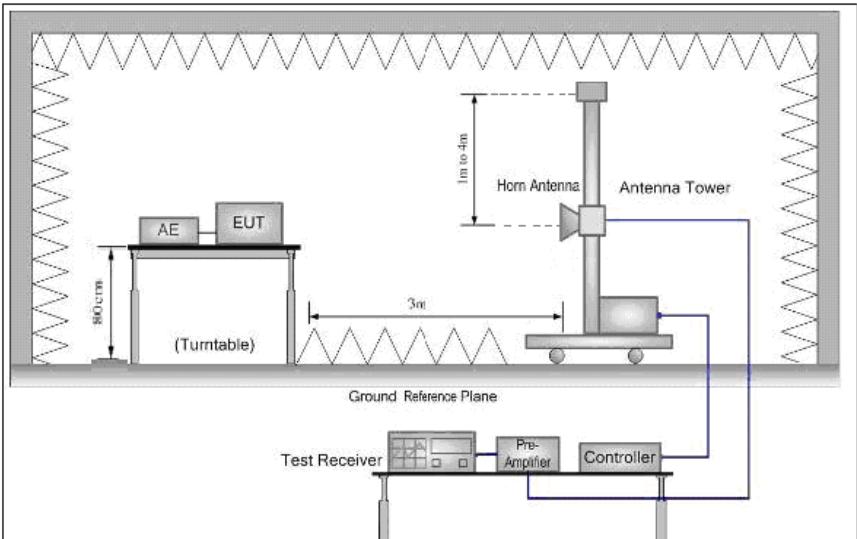
Report No.: SZEM150700437303
Page: 153 of 193

Test mode:		802.11n(HT40)		Frequency(MHz):		5795	Remark:		Peak
Frequency (MHz)	Cable Loss (dB)	Antenna Factor (dB/m)	Preamp Factor (dB)	Read Level (dBuV)	Level (dBuV/m)	Limit Line (dBuV/m)	Over Limit (dB)	Polarization	
3388.719	7.18	32.75	38.69	48.29	49.53	74	-24.47	Vertical	
4754.514	6.31	34.67	39.22	48.21	49.97	74	-24.03	Vertical	
7838.091	9.39	35.69	39.01	45.30	51.37	74	-22.63	Vertical	
9309.210	9.94	36.75	38.12	43.42	51.99	74	-22.01	Vertical	
11590.000	10.43	38.29	38.51	43.07	53.28	74	-20.72	Vertical	
17385.000	16.03	40.95	41.73	37.01	52.26	74	-21.74	Vertical	
3524.966	6.96	32.92	38.75	46.89	48.02	74	-25.98	Horizontal	
4712.109	6.22	34.65	39.21	47.52	49.18	74	-24.82	Horizontal	
7348.469	9.11	35.48	39.05	45.56	51.10	74	-22.90	Horizontal	
9342.630	9.96	36.82	38.10	42.70	51.38	74	-22.62	Horizontal	
11590.000	10.43	38.29	38.51	42.38	52.59	74	-21.41	Horizontal	
17385.000	16.03	40.95	41.73	36.79	52.04	74	-21.96	Horizontal	

Remark:

- 1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:
Final Test Level = Receiver Reading + Antenna Factor + Cable Factor – Preamplifier Factor
- 2) Scan from 9kHz to 25GHz, The disturbance above 13GHz and below 30MHz was very low, and the above harmonics were the highest point could be found when testing, so only the above harmonics had been displayed. The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported .
- 3) As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

6.8 Restricted bands around fundamental frequency

Test Requirement:	47 CFR Part 15 Section 15.407(b)		
Test Method:	ANSI C63.10: 2013		
Test Site:	Measurement Distance: 3m (Semi-Anechoic Chamber)		
Limit:	Frequency	Limit (dB _V /m @3m)	Remark
	30MHz-88MHz	40.0	Quasi-peak Value
	88MHz-216MHz	43.5	Quasi-peak Value
	216MHz-960MHz	46.0	Quasi-peak Value
	960MHz-1GHz	54.0	Quasi-peak Value
	Above 1GHz	54.0	Average Value
		74.0	Peak Value
Test Setup:			



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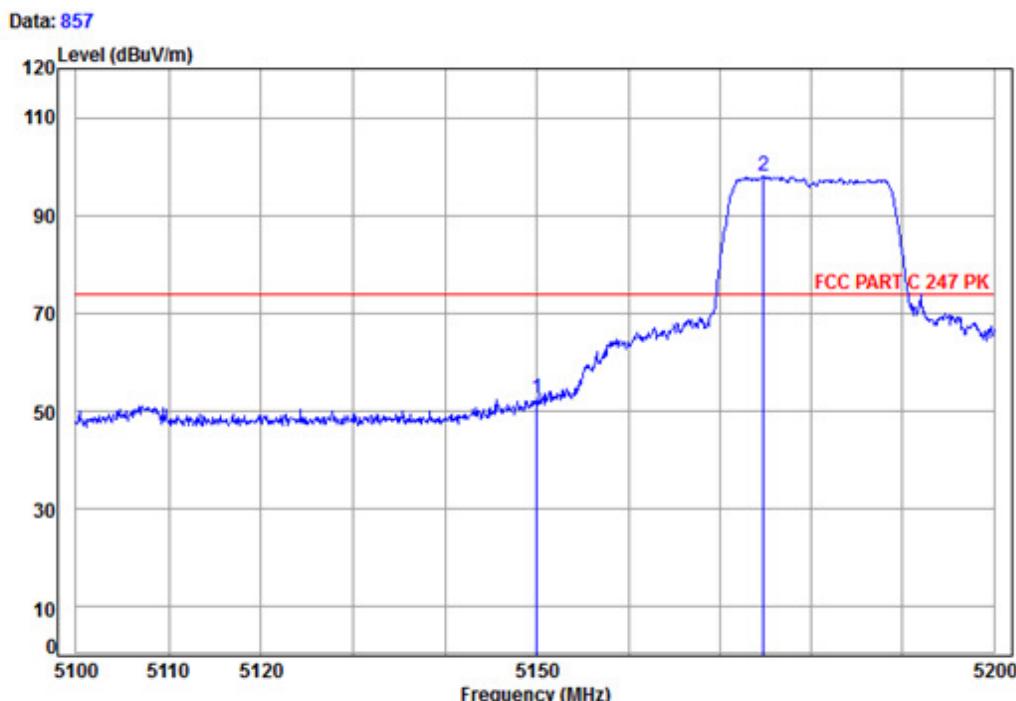
Report No.: SZEM150700437303

Page: 155 of 193

Test Procedure:	<ol style="list-style-type: none">a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.c. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.f. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channelg. Test the EUT in the outermost channels.h. Repeat above procedures until all frequencies measured was complete.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40). Only the worst case is recorded in the report. Pre-scan was performed at Antenna 0 and Antenna 1, no worst case was found. Only the test data of Antenna 0 was shown in this report.
Instruments Used:	Refer to section 5.10 for details.
Test Results:	Pass

Test plot as follows:

Test mode:	802.11a	Frequency(MHz):	5180	Remark:	Peak	Vertical
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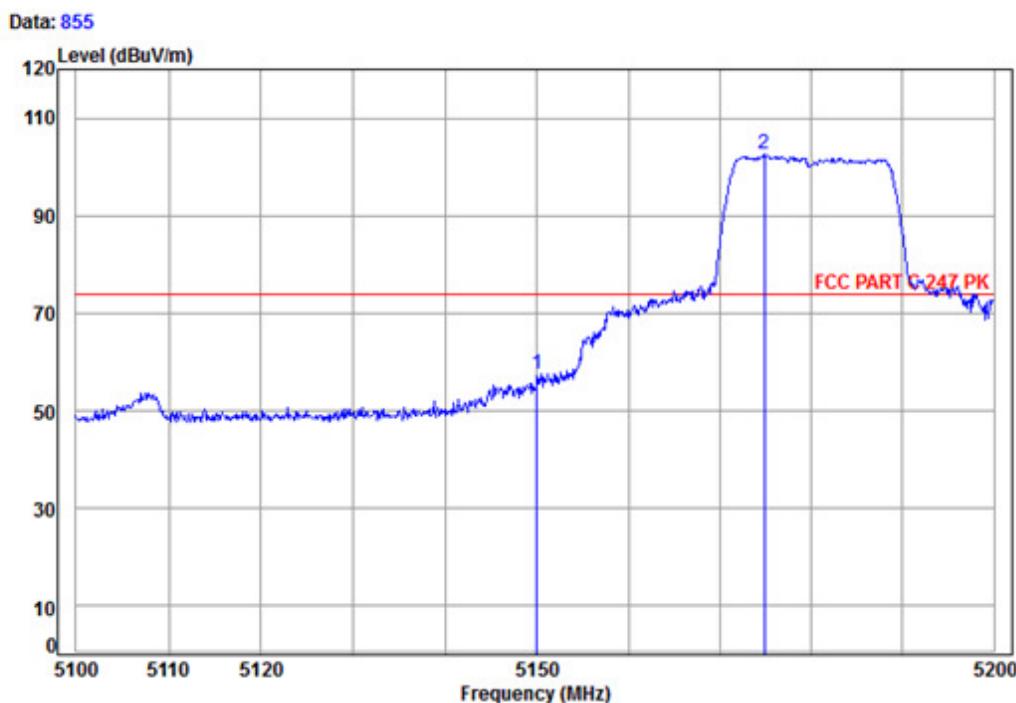
Site : chamber
Condition: FCC PART C 247 PK 3m Vertical

Job No: : 4373CR

Mode: : 5180 N20 Band edge

Freq	Cable	Ant	Preamp	Read	Limit	Over	
	Loss	Factor	Factor	Level			
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m
1	5150.00	6.10	34.86	39.28	50.97	52.65	74.00 -21.35
2 pp	5174.72	6.12	34.86	39.28	96.41	98.11	74.00 24.11

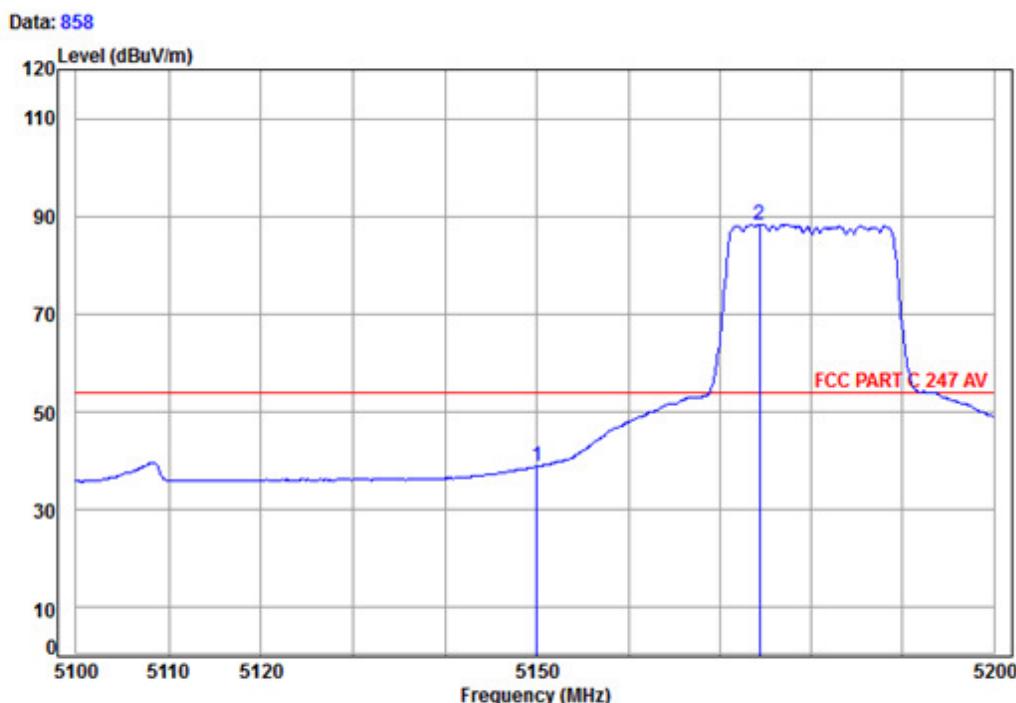
Test mode:	802.11a	Frequency(MHz):	5180	Remark:	Peak	Horizontal
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Site : chamber
Condition: FCC PART C 247 PK 3m Horizontal
Job No: : 4373CR
Mode: : 5180 N20 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.00	6.10	34.86	39.28	55.87	57.55	74.00	-16.45
2 pp	5174.82	6.12	34.86	39.28	100.81	102.51	74.00	28.51

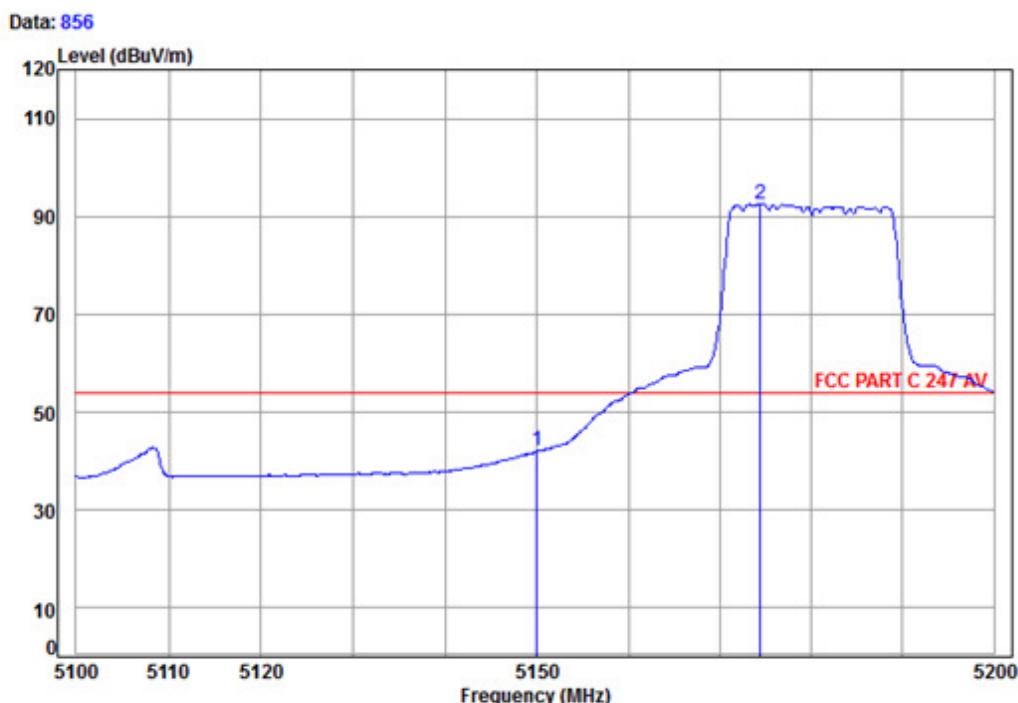
Test mode:	802.11a	Frequency(MHz):	5180	Remark:	Average	Vertical
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Site : chamber
Condition: FCC PART C 247 AV 3m Vertical
Job No: : 4373CR
Mode: : 5180 N20 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.00	6.10	34.86	39.28	37.24	38.92	54.00	-15.08
2 pp	5174.32	6.12	34.86	39.28	86.60	88.30	54.00	34.30

Test mode:	802.11a	Frequency(MHz):	5180	Remark:	Average	Horizontal
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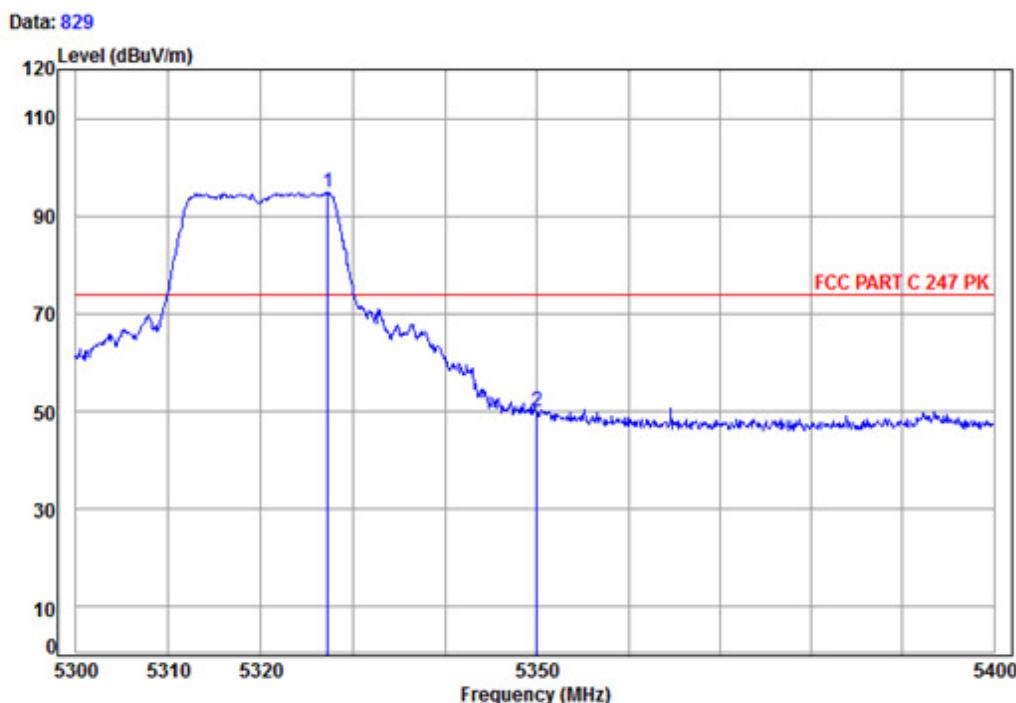


Site : chamber
Condition: FCC PART C 247 AV 3m Horizontal
Job No: : 4373CR
Mode: : 5180 N20 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.00	6.10	34.86	39.28	40.50	42.18	54.00	-11.82
2 pp	5174.42	6.12	34.86	39.28	90.83	92.53	54.00	38.53



Test mode:	802.11a	Frequency(MHz):	5320	Remark:	Peak	Vertical
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Site : chamber

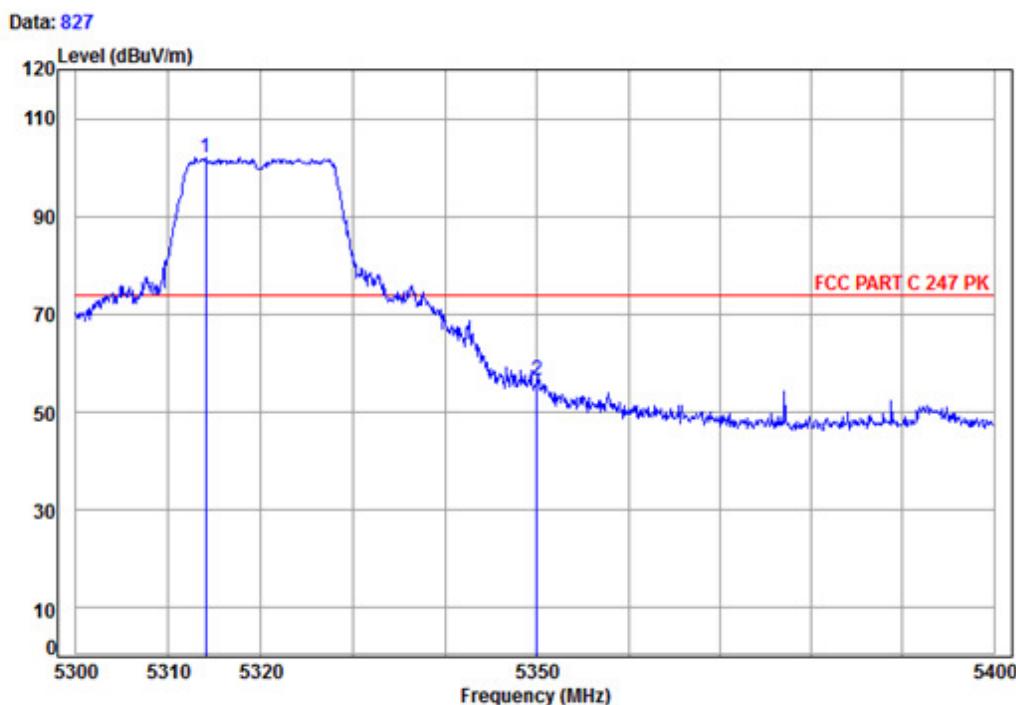
Condition: FCC PART C 247 PK 3m Vertical

Job No: : 4373CR

Mode: : 5320 A Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5327.21	6.24	34.81	39.26	92.96	94.75	74.00	20.75
2	5350.00	6.25	34.80	39.26	48.32	50.11	74.00	-23.89

Test mode:	802.11a	Frequency(MHz):	5320	Remark:	Peak	Horizontal
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Site : chamber

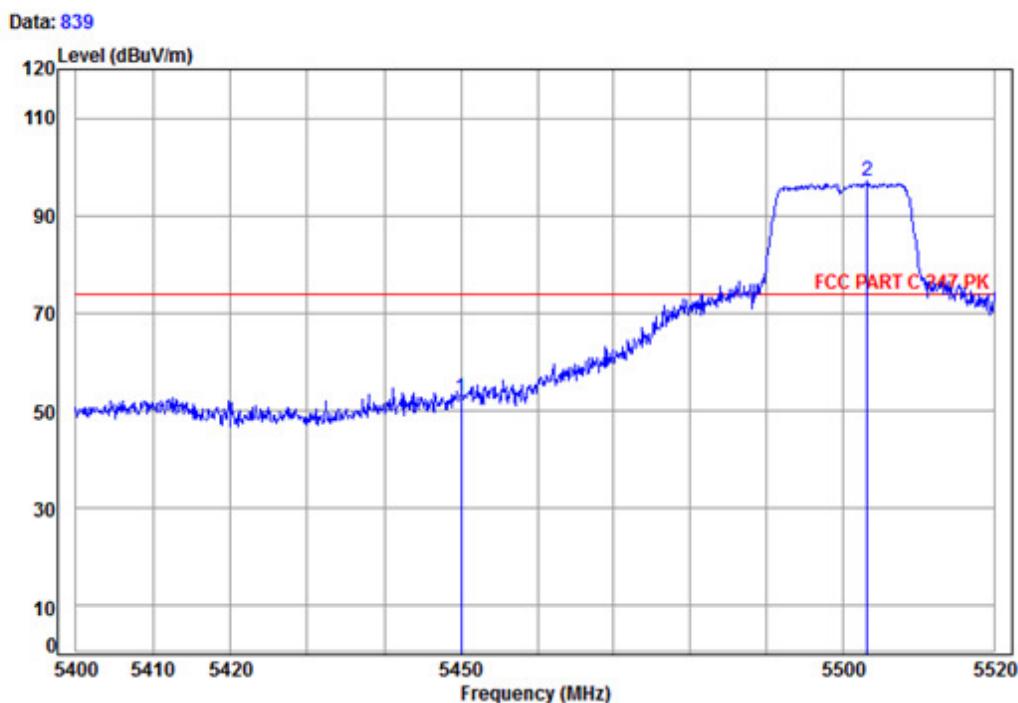
Condition: FCC PART C 247 PK 3m Horizontal

Job No: : 4373CR

Mode: : 5320 A Band edge

	Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Level	Level	Line	Limit
1 pp	5313.99	6.23	34.81	39.26	100.12	101.90	74.00 27.90
2	5350.00	6.25	34.80	39.26	54.76	56.55	74.00 -17.45

Test mode:	802.11a	Frequency(MHz):	5500	Remark:	Peak	Vertical
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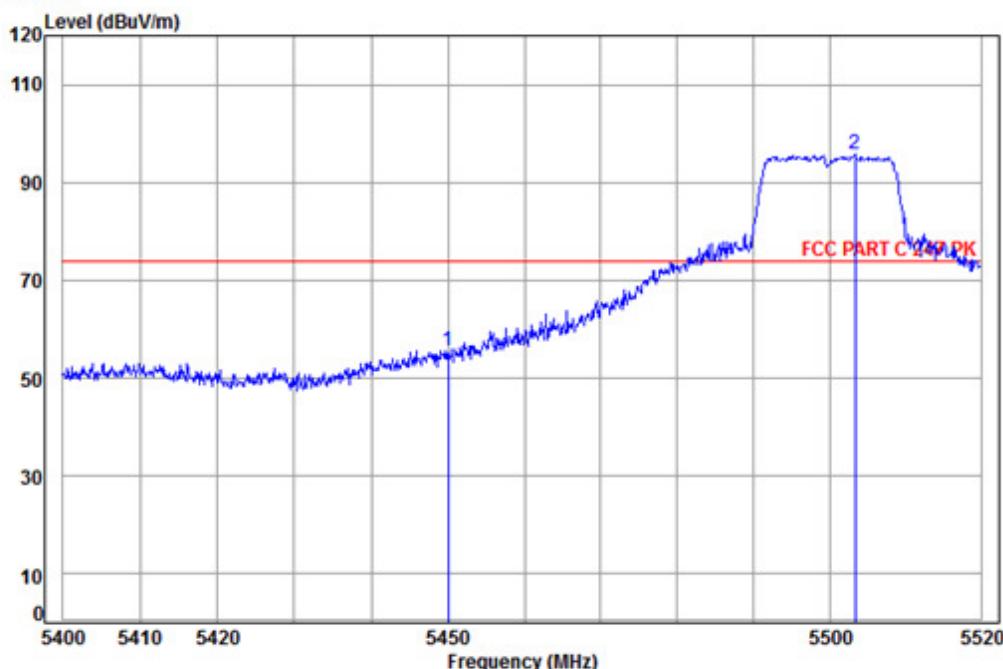


Site : chamber
Condition: FCC PART C 247 PK 3m Vertical
Job No: : 4373CR
Mode: : 5500 N20 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5450.00	6.32	34.94	39.24	50.49	52.51	74.00	-21.49
2 pp	5503.28	6.37	35.11	39.24	94.73	96.97	74.00	22.97

Test mode:	802.11a	Frequency(MHz):	5500	Remark:	Peak	Horizontal
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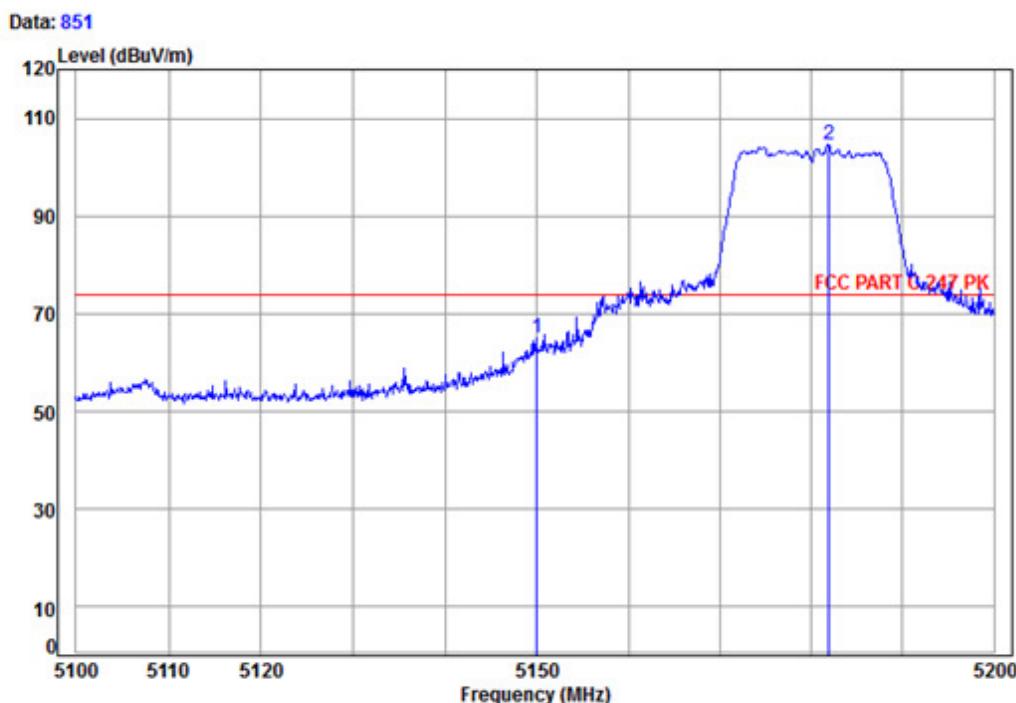
Data: 842



Site : chamber
Condition: FCC PART C 247 PK 3m Horizontal
Job No: : 4373CR
Mode: : 5500 N20 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5450.00	6.32	34.94	39.24	53.44	55.46	74.00	-18.54
2 pp	5503.40	6.37	35.11	39.24	93.56	95.80	74.00	21.80

Test mode:	802.11n(HT20)	Frequency(MHz):	5180	Remark:	Peak	Vertical
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Site : chamber

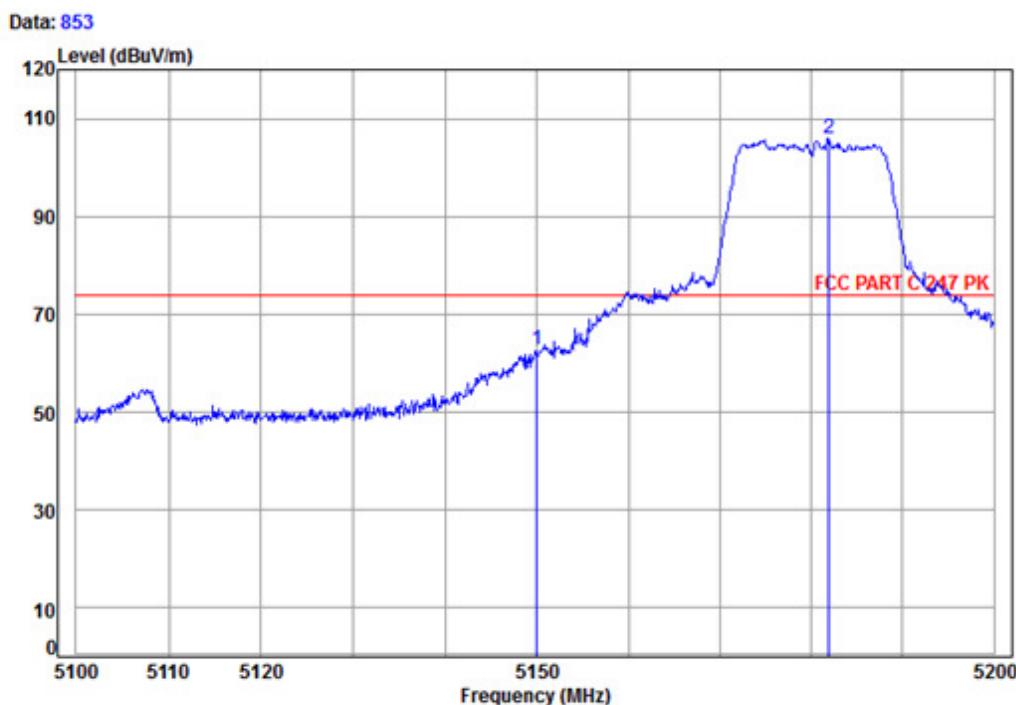
Condition: FCC PART C 247 PK 3m Vertical

Job No: : 4373CR

Mode: : 5180 A Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.00	6.10	34.86	39.28	63.29	64.97	74.00	-9.03
2 pp	5181.86	6.13	34.85	39.28	102.80	104.50	74.00	30.50

Test mode:	802.11n(HT20)	Frequency(MHz):	5180	Remark:	Peak	Horizontal
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Site : chamber

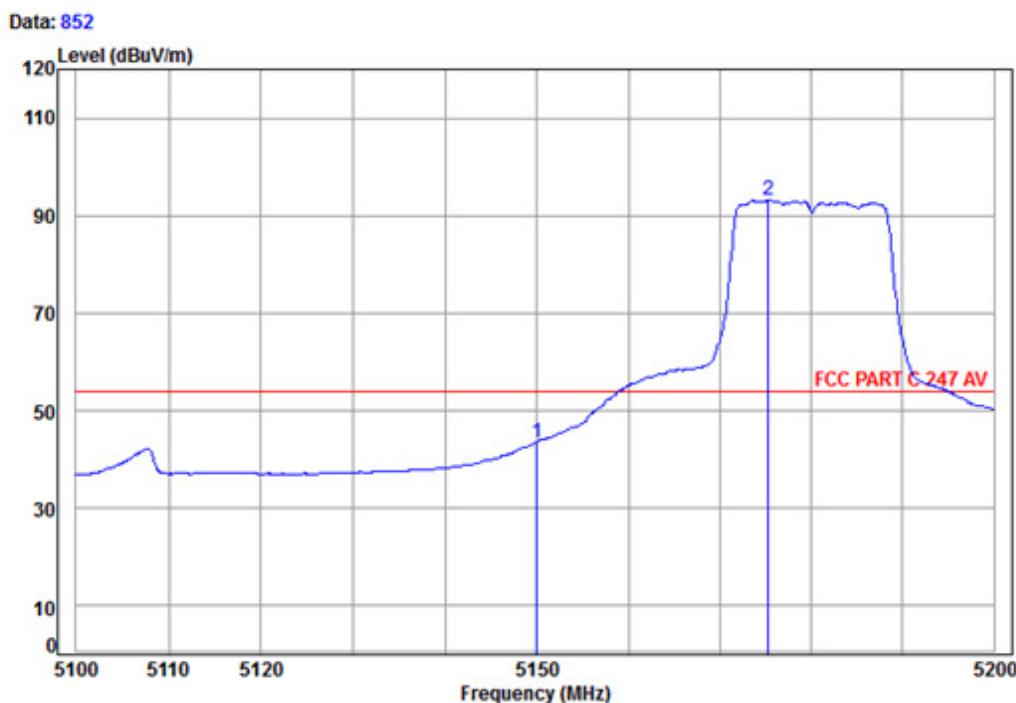
Condition: FCC PART C 247 PK 3m Horizontal

Job No: : 4373CR

Mode: : 5180 A Band edge

	Freq	Cable Loss	Ant Factor	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m		dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.00	6.10	34.86	39.28	60.97	62.65	74.00	-11.35	
2 pp	5181.86	6.13	34.85	39.28	104.28	105.98	74.00	31.98	

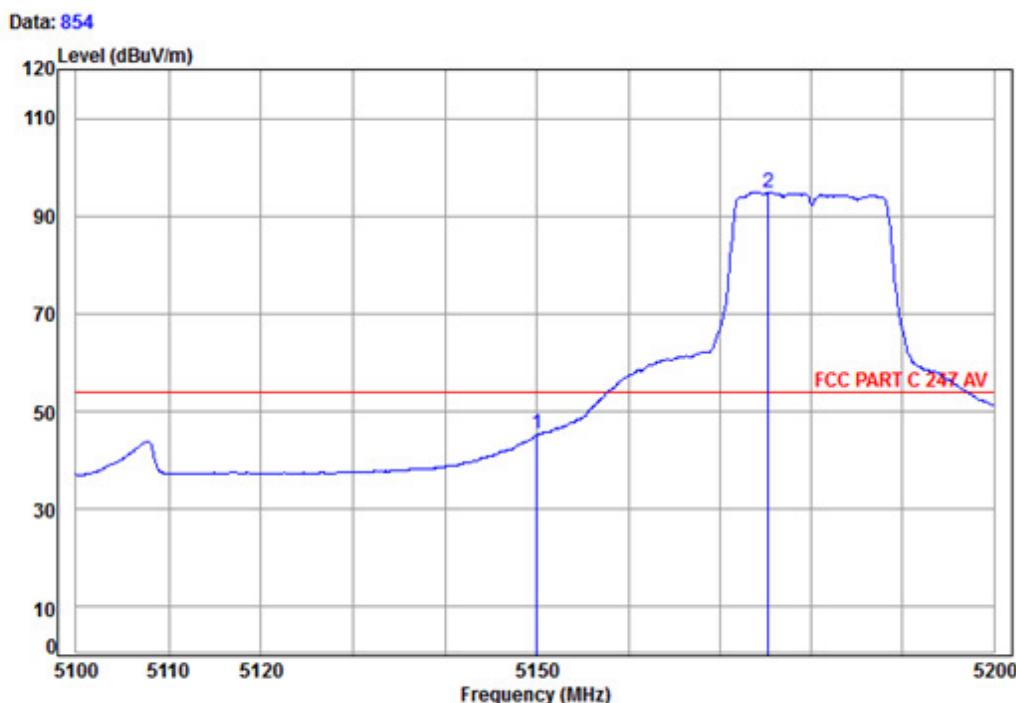
Test mode:	802.11n(HT20)	Frequency(MHz):	5180	Remark:	Average	Vertical
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Site : chamber
Condition: FCC PART C 247 AV 3m Vertical
Job No: 4373CR
Mode: 5180 A Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.00	6.10	34.86	39.28	41.93	43.61	54.00	-10.39
2 pp	5175.22	6.12	34.86	39.28	91.48	93.18	54.00	39.18

Test mode:	802.11n(HT20)	Frequency(MHz):	5180	Remark:	Average	Horizontal
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Site : chamber

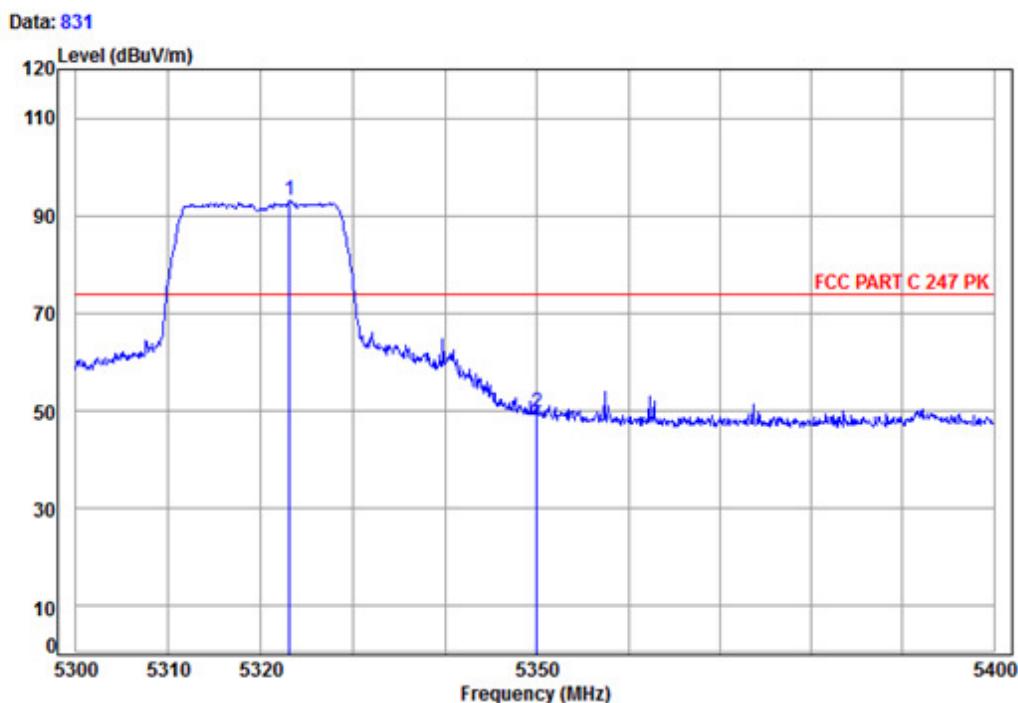
Condition: FCC PART C 247 AV 3m Horizontal

Job No: : 4373CR

Mode: : 5180 A Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.00	6.10	34.86	39.28	43.67	45.35	54.00	-8.65
2 pp	5175.22	6.12	34.86	39.28	93.23	94.93	54.00	40.93

Test mode:	802.11n(HT20)	Frequency(MHz):	5320	Remark:	Peak	Vertical
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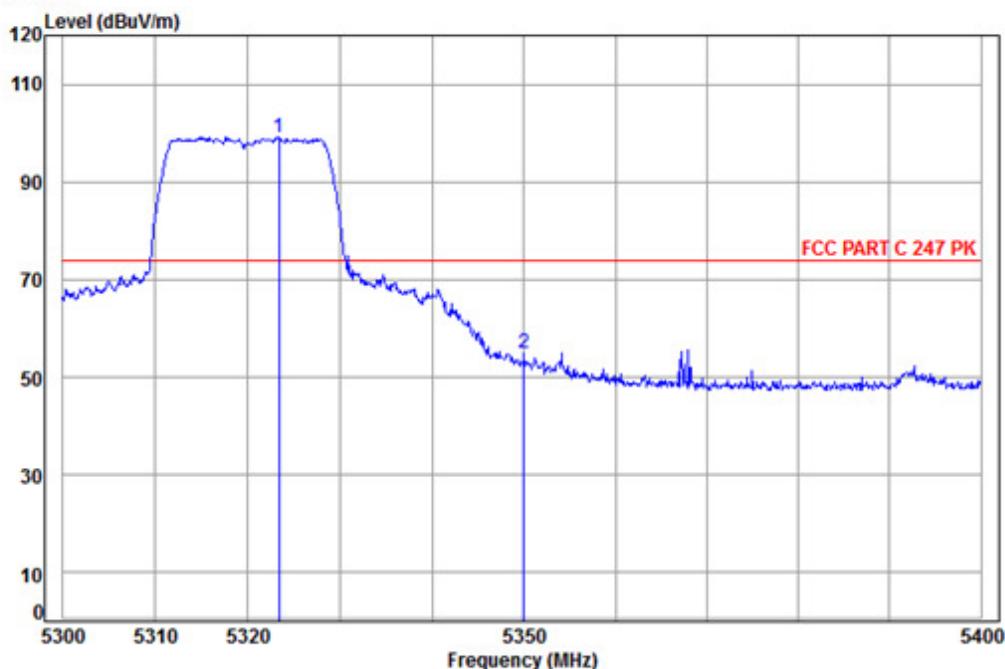


Site : chamber
Condition: FCC PART C 247 PK 3m Vertical
Job No: 4373CR
Mode: 5320 N20 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5323.13	6.23	34.81	39.26	91.25	93.03	74.00	19.03
2	5350.00	6.25	34.80	39.26	47.98	49.77	74.00	-24.23

Test mode:	802.11n(HT20)	Frequency(MHz):	5320	Remark:	Peak	Horizontal
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Data: 833

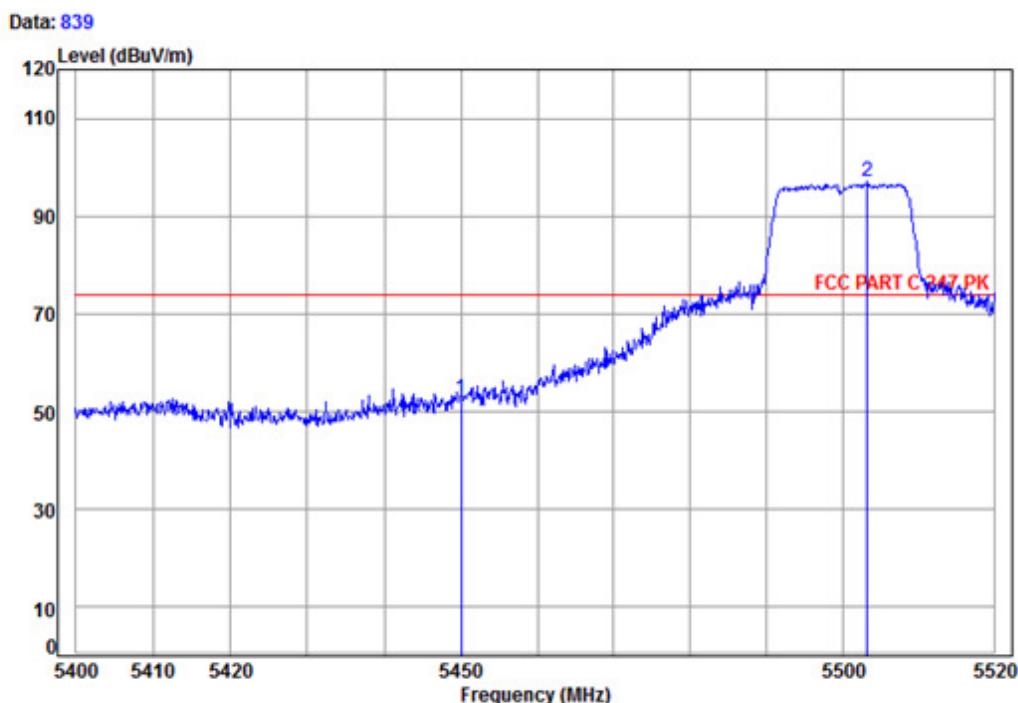


Site : chamber
Condition: FCC PART C 247 PK 3m Horizontal
Job No: : 4373CR
Mode: : 5320 N20 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5323.33	6.23	34.81	39.26	97.42	99.20	74.00	25.20
2	5350.00	6.25	34.80	39.26	53.24	55.03	74.00	-18.97



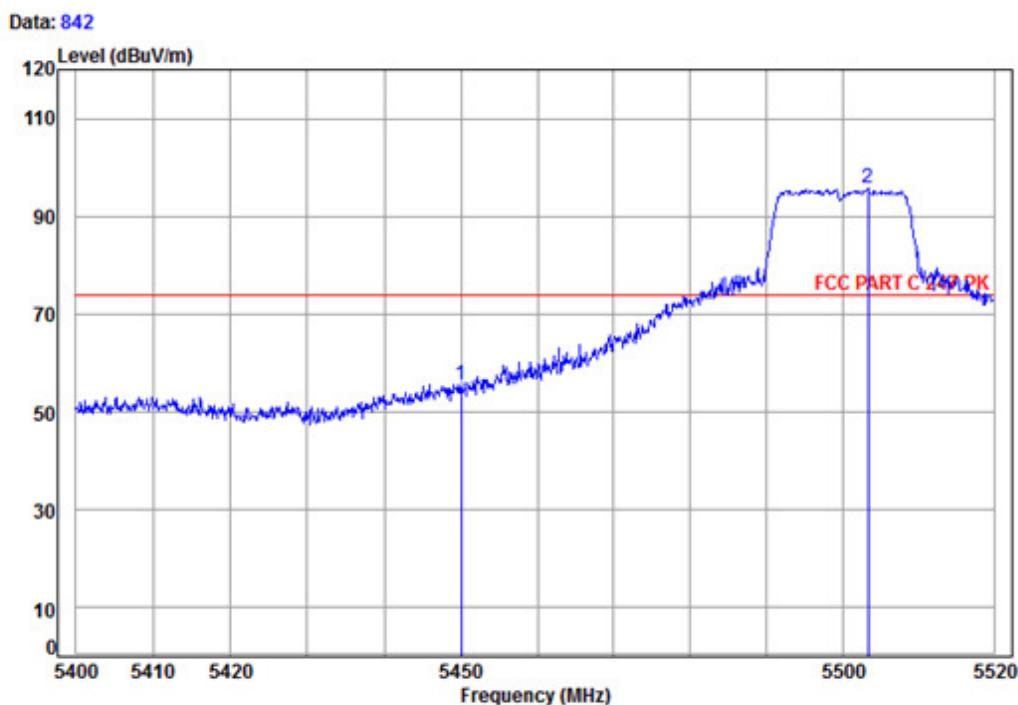
Test mode:	802.11n(HT20)	Frequency(MHz):	5500	Remark:	Peak	Vertical
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Site : chamber
Condition: FCC PART C 247 PK 3m Vertical
Job No: : 4373CR
Mode: : 5500 N20 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5450.00	6.32	34.94	39.24	50.49	52.51	74.00	-21.49
2 pp	5503.28	6.37	35.11	39.24	94.73	96.97	74.00	22.97

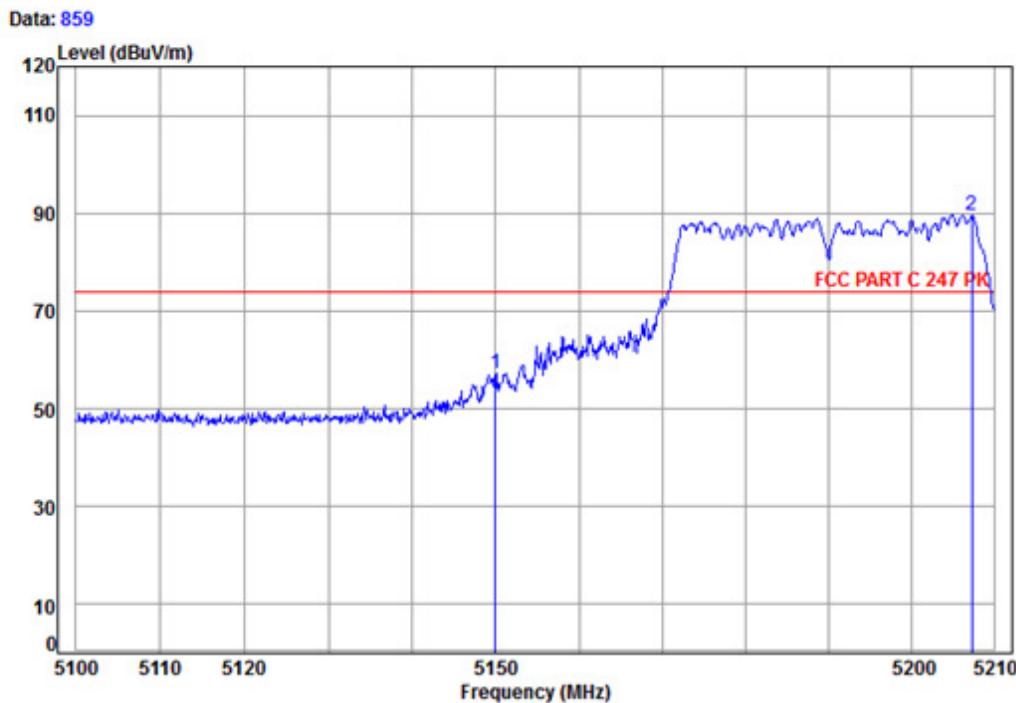
Test mode:	802.11n(HT20)	Frequency(MHz):	5500	Remark:	Peak	Horizontal
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Site : chamber
Condition: FCC PART C 247 PK 3m Horizontal
Job No: : 4373CR
Mode: : 5500 N20 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5450.00	6.32	34.94	39.24	53.44	55.46	74.00	-18.54
2 pp	5503.40	6.37	35.11	39.24	93.56	95.80	74.00	21.80

Test mode:	802.11n(HT40)	Frequency(MHz):	5190	Remark:	Peak	Vertical
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Site : chamber

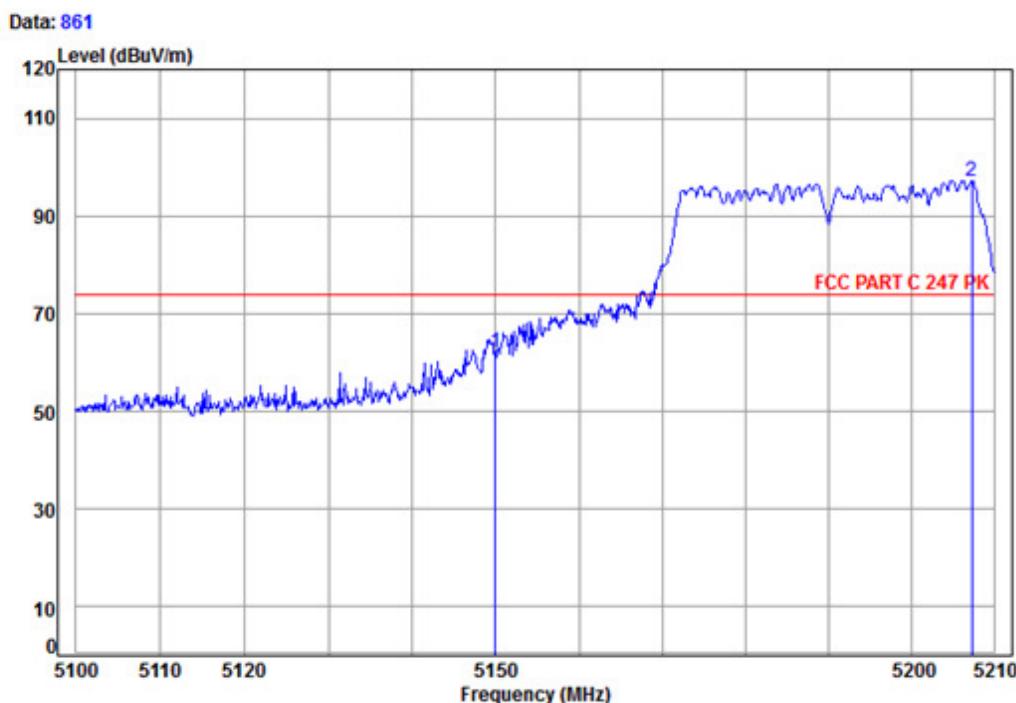
Condition: FCC PART C 247 PK 3m Vertical

Job No: : 4373CR

Mode: : 5190 N40 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.00	6.10	34.86	39.28	55.56	57.24	74.00	-16.76
2 pp	5207.33	6.15	34.85	39.27	87.83	89.56	74.00	15.56

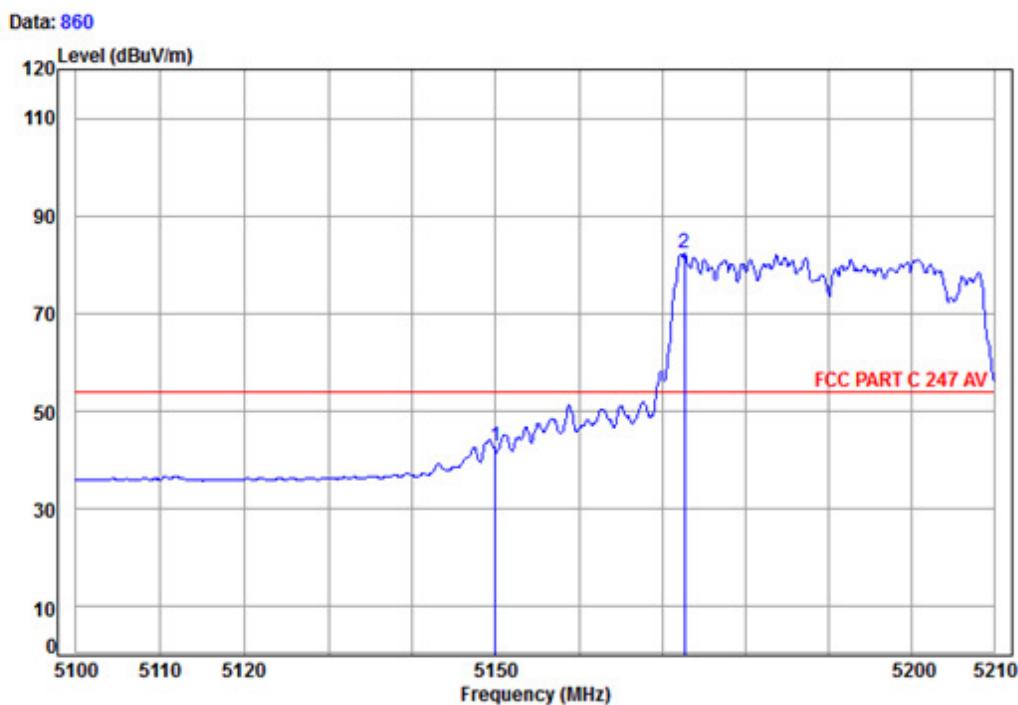
Test mode:	802.11n(HT40)	Frequency(MHz):	5190	Remark:	Peak	Horizontal
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Site : chamber
Condition: FCC PART C 247 PK 3m Horizontal
Job No: : 4373CR
Mode: : 5190 N40 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.00	6.10	34.86	39.28	60.39	62.07	74.00	-11.93
2 pp	5207.33	6.15	34.85	39.27	95.53	97.26	74.00	23.26

Test mode:	802.11n(HT40)	Frequency(MHz):	5190	Remark:	Average	Vertical
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Site : chamber

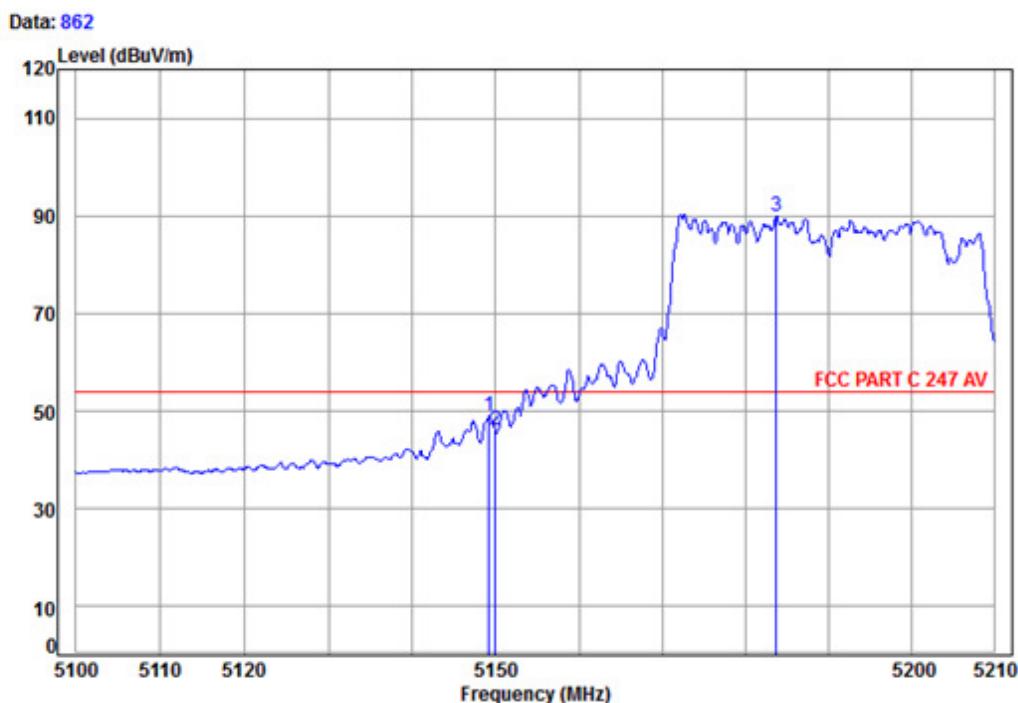
Condition: FCC PART C 247 AV 3m Vertical

Job No: : 4373CR

Mode: : 5190 N40 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5150.00	6.10	34.86	39.28	41.30	42.98	54.00	-11.02
2 pp	5172.67	6.12	34.86	39.28	80.55	82.25	54.00	28.25

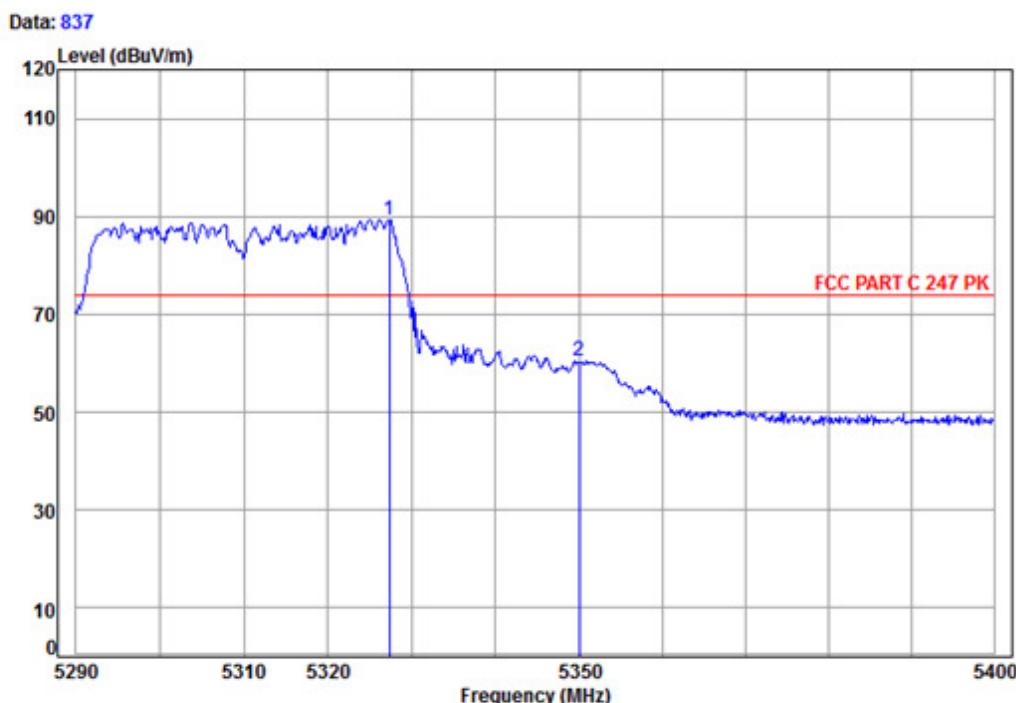
Test mode:	802.11n(HT40)	Frequency(MHz):	5190	Remark:	Average	Horizontal
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Site : chamber
 Condition: FCC PART C 247 AV 3m Horizontal
 Job No: : 4373CR
 Mode: : 5190 N40 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Limit Line	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5149.21	6.10	34.86	39.28	47.26	48.94	54.00	-5.06
2	5150.00	6.10	34.86	39.28	44.31	45.99	54.00	-8.01
3 pp	5183.72	6.13	34.85	39.28	88.24	89.94	54.00	35.94

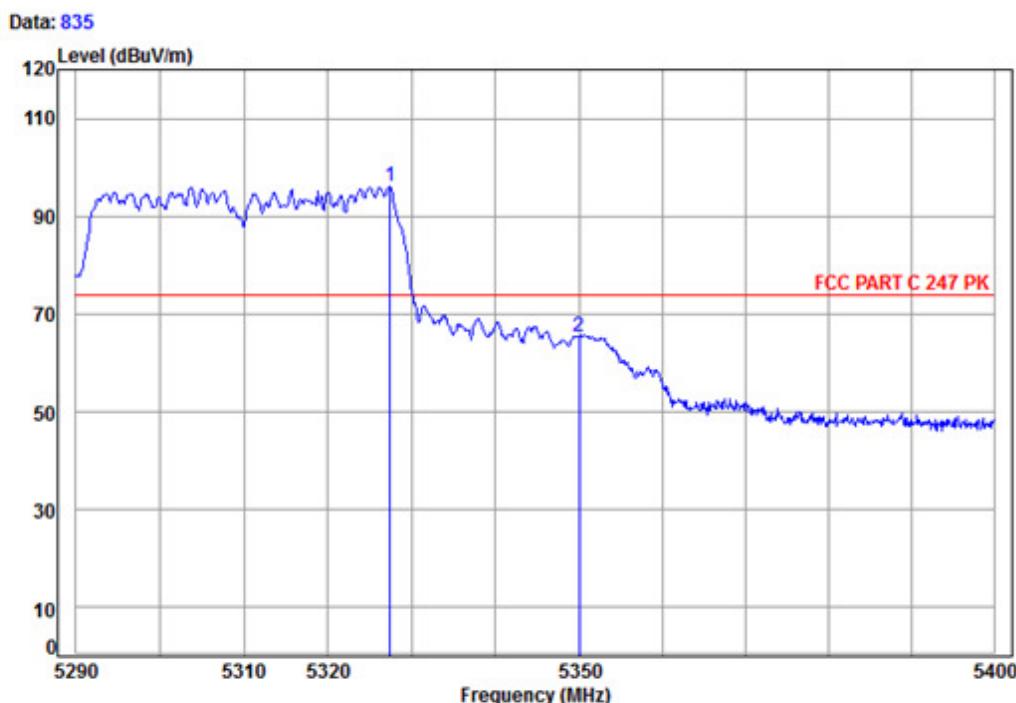
Test mode:	802.11n(HT40)	Frequency(MHz):	5310	Remark:	Peak	Vertical
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Site : chamber
Condition: FCC PART C 247 PK 3m Vertical
Job No: : 4373CR
Mode: : 5310 N40 Band edge

	Cable	Ant	Preamp	Read	Limit	Over	
	Freq	Loss	Factor	Level	Level	Line	Limit
1 pp	5327.26	6.24	34.81	39.26	87.60	89.39	74.00 15.39
2	5350.00	6.25	34.80	39.26	58.74	60.53	74.00 -13.47

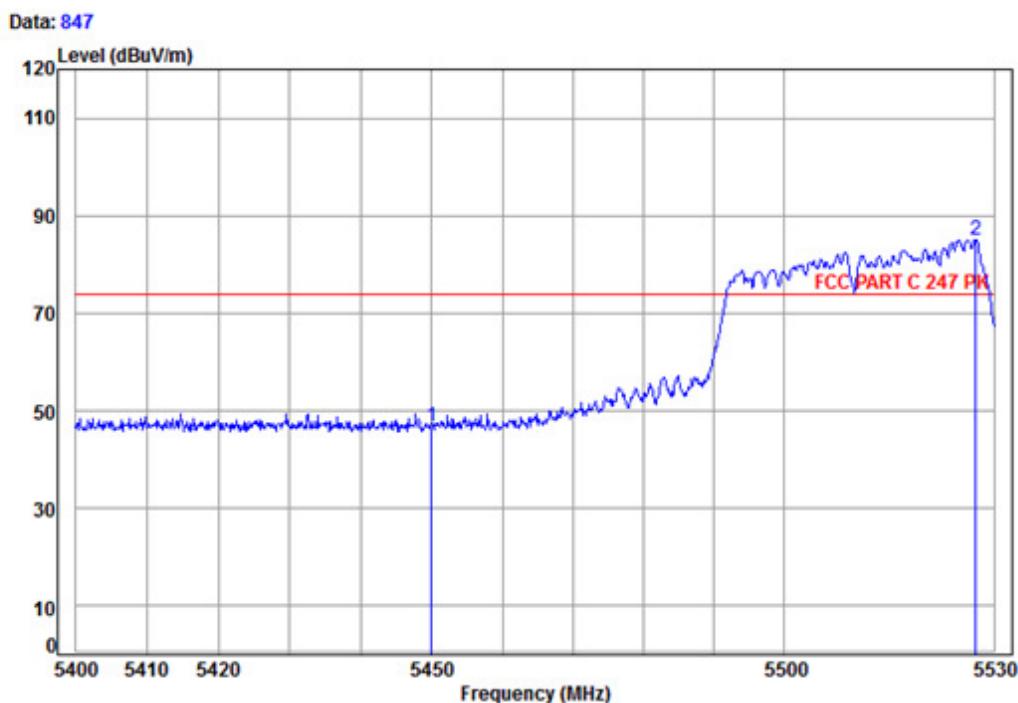
Test mode:	802.11n(HT40)	Frequency(MHz):	5310	Remark:	Peak	Horizontal
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Site : chamber
Condition: FCC PART C 247 PK 3m Horizontal
Job No: : 4373CR
Mode: : 5310 N40 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1 pp	5327.37	6.24	34.81	39.26	94.19	95.98	74.00	21.98
2	5350.00	6.25	34.80	39.26	63.70	65.49	74.00	-8.51

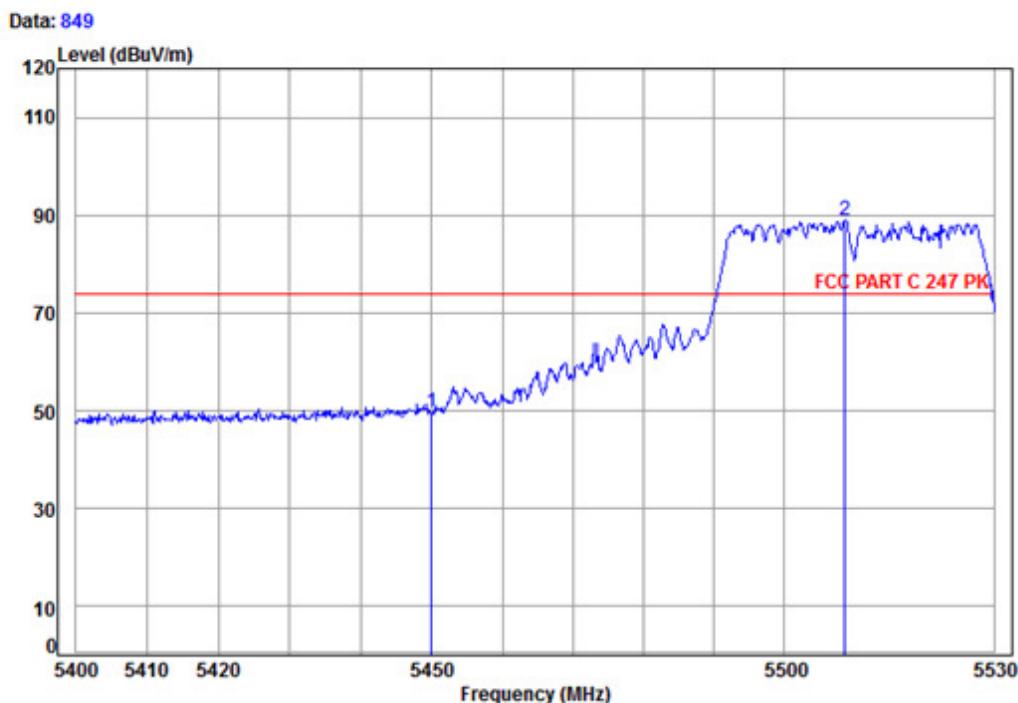
Test mode:	802.11n(HT40)	Frequency(MHz):	5510	Remark:	Peak	Vertical
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Site : chamber
 Condition: FCC PART C 247 PK 3m Vertical
 Job No: : 4543CR
 Mode: : 5510 N40 Band edge

	Cable Freq	Ant Loss	Preamp Factor	Read Level	Limit Level	Line Limit	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5450.00	6.32	34.94	39.24	44.58	46.60	74.00	-27.40
2 pp	5527.37	6.43	35.19	39.24	82.76	85.14	74.00	11.14

Test mode:	802.11n(HT40)	Frequency(MHz):	5510	Remark:	Peak	Horizontal
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Site : chamber

Condition: FCC PART C 247 PK 3m Horizontal

Job No: : 4373CR

Mode: : 5510 N40 Band edge

	Cable Loss	Ant Factor	Preampl Factor	Read Level	Limit Level	Line Limit	Over Limit	
Freq	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	5450.00	6.32	34.94	39.24	47.57	49.59	74.00	-24.41
2 pp	5508.73	6.38	35.13	39.24	86.81	89.08	74.00	15.08

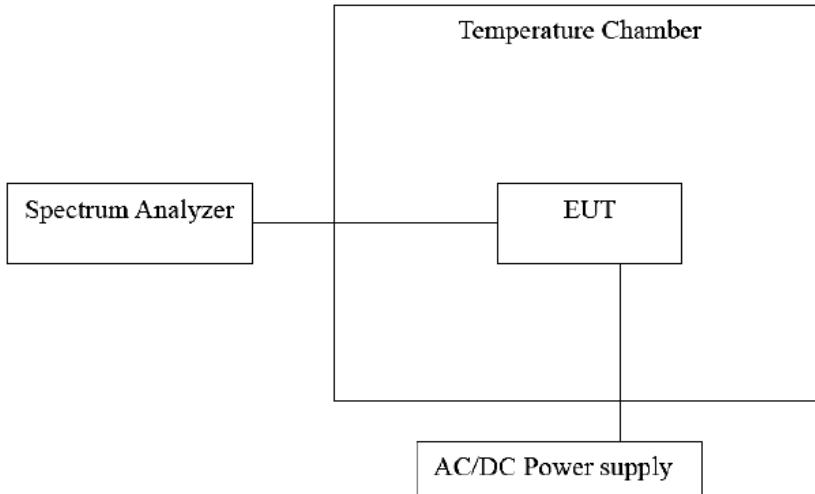
Note:

The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Final Test Level = Receiver Reading + Antenna Factor + Cable Factor - Preamplifier Factor



6.9 Frequency Stability

Test Requirement:	47 CFR Part 15 Section 15.407(g)
Test Method:	ANSI C63.10: 2013
Test Setup:	
Limit:	The frequency tolerance shall be maintained within the band of operation frequency over a temperature variation of 0 degrees to 35 degrees C at normal supply voltage, and for a variation in the primary supply voltage from 85% to 115% of the rated supply voltage at a temperature of 20 degrees C.
Test Procedure:	<ol style="list-style-type: none">The EUT was placed inside the environmental test chamber and powered by nominal AC/DC voltage.Turn the EUT on and couple its output to a spectrum analyzer.Turn the EUT off and set the chamber to the highest temperature specified.Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize.Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
Exploratory Test Mode:	Transmitting with all kind of modulations, data rates.
Final Test Mode:	Through Pre-scan, find the 6Mbps of rate is the worst case of 802.11a; MCS0 of rate is the worst case of 802.11n(HT20); MCS0 of rate is the worst case of 802.11n(HT40); Only the worst case is recorded in the report. Pre-scan was performed at Antenna 0 and Antenna 1, no worst case was found. Only the test data of Antenna 0 was shown in this report.



SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM150700437303
Page: 181 of 193

Test plot as follows:

Test mode:		802.11a	Frequency(MHz):	5180
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5180.0072	7200	Pass
35		5180.0054	5400	Pass
25		5179.9879	-12100	Pass
15		5179.9974	-2600	Pass
5		5180.0032	3200	Pass
0		5180.0033	3300	Pass
20	138	5179.9831	-16900	Pass
	120	5180.0031	3100	Pass
	102	5179.9825	-17500	Pass

Test mode:		802.11a	Frequency(MHz):	5200
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5200.0078	7800	Pass
35		5200.0066	6600	Pass
25		5200.0075	7500	Pass
15		5200.0042	4200	Pass
5		5199.9990	-1000	Pass
0		5199.9940	-6000	Pass
20	138	5199.9957	-4300	Pass
	120	5200.0032	3200	Pass
	102	5200.0043	4300	Pass

Test mode:		802.11a	Frequency(MHz):	5240
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5240.0033	3300	Pass
35		5240.0029	2900	Pass
25		5240.0024	2400	Pass
15		5239.9989	-1100	Pass
5		5239.9983	-1700	Pass
0		5239.9979	-2100	Pass
20	138	5240.0032	3200	Pass
	120	5240.0010	1000	Pass
	102	5239.9986	-1400	Pass

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Shenzhen Branch**

Report No.: SZEM150700437303
Page: 182 of 193

Test mode:		802.11a	Frequency(MHz):	5260
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5259.9977	-2300	Pass
35		5259.9988	-1200	Pass
25		5259.9989	-1100	Pass
15		5259.9988	-1200	Pass
5		5260.0012	1200	Pass
0		5260.0023	2300	Pass
20	138	5260.0033	3300	Pass
	120	5260.0009	900	Pass
	102	5259.9983	-1700	Pass

Test mode:		802.11a	Frequency(MHz):	5300
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5300.0031	3100	Pass
35		5300.0026	2600	Pass
25		5300.0017	1700	Pass
15		5300.0018	1800	Pass
5		5299.9986	-1400	Pass
0		5299.9982	-1800	Pass
20	138	5300.0026	2600	Pass
	120	5300.0013	1300	Pass
	102	5300.0022	2200	Pass

Test mode:		802.11a	Frequency(MHz):	5320
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5320.0064	6400	Pass
35		5320.0043	4300	Pass
25		5320.0035	3500	Pass
15		5320.0013	1300	Pass
5		5320.0032	3200	Pass
0		5319.9979	-2100	Pass
20	138	5320.0033	3300	Pass
	120	5320.0032	3200	Pass
	102	5320.0035	3500	Pass



**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 183 of 193

Test mode:		802.11a	Frequency(MHz):	5500
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5500.0101	10100	Pass
35		5500.0044	4400	Pass
25		5500.0040	4000	Pass
15		5500.0023	2300	Pass
5		5499.9984	-1600	Pass
0		5500.0032	3200	Pass
20	138	5500.0031	3100	Pass
	120	5500.0019	1900	Pass
	102	5500.0027	2700	Pass

Test mode:		802.11a	Frequency(MHz):	5600
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5599.9966	-3400	Pass
35		5599.9967	-3300	Pass
25		5599.9948	-5200	Pass
15		5599.9974	-2600	Pass
5		5599.9983	-1700	Pass
0		5600.0039	3900	Pass
20	138	5600.0042	4200	Pass
	120	5600.0035	3500	Pass
	102	5600.0048	4800	Pass

Test mode:		802.11a	Frequency(MHz):	5700
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5700.0101	10100	Pass
35		5700.0063	6300	Pass
25		5700.0035	3500	Pass
15		5700.0022	2200	Pass
5		5699.9982	-1800	Pass
0		5700.0040	4000	Pass
20	138	5700.0042	4200	Pass
	120	5700.0033	3300	Pass
	102	5699.9978	-2200	Pass

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**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 184 of 193

Test mode:		802.11a		Frequency(MHz):	5745
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5745.0110	11000	Pass	
35		5745.0082	8200	Pass	
25		5745.0078	7800	Pass	
15		5745.0051	5100	Pass	
5		5744.9962	-3800	Pass	
0		5744.9982	-1800	Pass	
20	138	5745.0022	2200	Pass	
	120	5745.0034	3400	Pass	
	102	5745.0024	2400	Pass	

Test mode:		802.11a		Frequency(MHz):	5785
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5785.0055	5500	Pass	
35		5785.0029	2900	Pass	
25		5785.0021	2100	Pass	
15		5785.0011	1100	Pass	
5		5785.0028	2800	Pass	
0		5785.0037	3700	Pass	
20	138	5785.0033	3300	Pass	
	120	5785.0022	2200	Pass	
	102	5784.9978	-2200	Pass	

Test mode:		802.11a		Frequency(MHz):	5825
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5825.0066	6600	Pass	
35		5825.0033	3300	Pass	
25		5825.0021	2100	Pass	
15		5824.9989	-1100	Pass	
5		5824.9975	-2500	Pass	
0		5824.9964	-3600	Pass	
20	138	5825.0032	3200	Pass	
	120	5825.0019	1900	Pass	
	102	5825.0022	2200	Pass	

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**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 185 of 193

Test mode:		802.11n(HT20)	Frequency(MHz):	5180
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5180.0078	7800	Pass
35		5180.0034	3400	Pass
25		5179.9988	-1200	Pass
15		5179.9983	-1700	Pass
5		5180.0023	2300	Pass
0		5180.0032	3200	Pass
20	138	5180.0044	4400	Pass
	120	5179.9988	-1200	Pass
	102	5179.9980	-2000	Pass

Test mode:		802.11n(HT20)	Frequency(MHz):	5200
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5200.0077	7700	Pass
35		5200.0041	4100	Pass
25		5200.0032	3200	Pass
15		5200.0013	1300	Pass
5		5200.0029	2900	Pass
0		5200.0041	4100	Pass
20	138	5199.9974	-2600	Pass
	120	5199.9984	-1600	Pass
	102	5200.0031	3100	Pass

Test mode:		802.11n(HT20)	Frequency(MHz):	5240
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5240.0088	8800	Pass
35		5240.0024	2400	Pass
25		5240.0038	3800	Pass
15		5240.0022	2200	Pass
5		5240.0042	4200	Pass
0		5240.0017	1700	Pass
20	138	5240.0036	3600	Pass
	120	5239.9988	-1200	Pass
	102	5239.9985	-1500	Pass

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**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 186 of 193

Test mode:		802.11n(HT20)		Frequency(MHz):	5260
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5260.0090	9000	Pass	
35		5260.0036	3600	Pass	
25		5260.0023	2300	Pass	
15		5259.9989	-1100	Pass	
5		5259.9977	-2300	Pass	
0		5260.0032	3200	Pass	
20	138	5260.0026	2600	Pass	
	120	5260.0023	2300	Pass	
	102	5260.0039	3900	Pass	

Test mode:		802.11n(HT20)		Frequency(MHz):	5300
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5300.0100	10000	Pass	
35		5300.0042	4200	Pass	
25		5299.9989	-1100	Pass	
15		5300.0014	1400	Pass	
5		5299.9968	-3200	Pass	
0		5299.9955	-4500	Pass	
20	138	5299.9978	-2200	Pass	
	120	5300.0015	1500	Pass	
	102	5300.0022	2200	Pass	

Test mode:		802.11n(HT20)		Frequency(MHz):	5320
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5320.0096	9600	Pass	
35		5320.0042	4200	Pass	
25		5320.0036	3600	Pass	
15		5320.0012	1200	Pass	
5		5320.0032	3200	Pass	
0		5319.9973	-2700	Pass	
20	138	5319.9978	-2200	Pass	
	120	5319.9988	-1200	Pass	
	102	5319.9965	-3500	Pass	

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**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 187 of 193

Test mode:		802.11n(HT20)		Frequency(MHz):	5500
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5500.0103	10300	Pass	
35		5500.0055	5500	Pass	
25		5500.0043	4300	Pass	
15		5500.0023	2300	Pass	
5		5500.0055	5500	Pass	
0		5499.9968	-3200	Pass	
20	138	5500.0044	4500	Pass	
	120	5500.0012	1200	Pass	
	102	5500.0031	3100	Pass	

Test mode:		802.11n(HT20)		Frequency(MHz):	5600
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5600.0078	7800	Pass	
35		5600.0023	2300	Pass	
25		5600.0042	4200	Pass	
15		5600.0022	2200	Pass	
5		5600.0034	3400	Pass	
0		5600.0045	4500	Pass	
20	138	5599.9945	-5500	Pass	
	120	5599.9978	-2200	Pass	
	102	5599.9964	-3600	Pass	

Test mode:		802.11n(HT20)		Frequency(MHz):	5700
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5700.0078	7800	Pass	
35		5700.0034	3400	Pass	
25		5699.9983	-1700	Pass	
15		5700.0021	2100	Pass	
5		5700.0033	3300	Pass	
0		5699.9935	-6500	Pass	
20	138	5699.9982	-1800	Pass	
	120	5700.0023	2300	Pass	
	102	5700.0036	3600	Pass	

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**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 188 of 193

Test mode:		802.11n(HT20)	Frequency(MHz):	5745
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5745.0088	8800	Pass
35		5745.0028	2800	Pass
25		5745.0025	2500	Pass
15		5745.0024	2400	Pass
5		5745.0019	1900	Pass
0		5745.0034	3400	Pass
20	138	5745.0034	3400	Pass
	120	5744.9979	-2100	Pass
	102	5745.0038	3800	Pass

Test mode:		802.11n(HT20)	Frequency(MHz):	5785
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5785.0099	9900	Pass
35		5785.0045	4500	Pass
25		5785.0029	2900	Pass
15		5784.9987	-1300	Pass
5		5784.9967	-3300	Pass
0		5785.0024	2400	Pass
20	138	5785.0038	3800	Pass
	120	5785.0021	2100	Pass
	102	5785.0045	4500	Pass

Test mode:		802.11n(HT20)	Frequency(MHz):	5825
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5824.9925	-7500	Pass
35		5824.9967	-3300	Pass
25		5824.9953	-4700	Pass
15		5824.9985	-1500	Pass
5		5825.0015	1500	Pass
0		5825.0049	4900	Pass
20	138	5825.0042	4200	Pass
	120	5824.9987	-1300	Pass
	102	5825.0024	2400	Pass



**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 189 of 193

Test mode:		802.11n(HT40)		Frequency(MHz):	5190
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5190.0111	11100	Pass	
35		5190.0110	11000	Pass	
25		5190.0104	10400	Pass	
15		5190.0066	6600	Pass	
5		5190.0062	6200	Pass	
0		5190.0078	7800	Pass	
20	138	5189.9910	-9000	Pass	
	120	5189.9967	-3300	Pass	
	102	5190.0040	4000	Pass	

Test mode:		802.11n(HT40)		Frequency(MHz):	5230
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5230.0121	12100	Pass	
35		5230.0110	11000	Pass	
25		5230.0094	9400	Pass	
15		5229.9988	-1200	Pass	
5		5229.9981	-1900	Pass	
0		5230.0052	5200	Pass	
20	138	5230.0036	3600	Pass	
	120	5230.0029	2900	Pass	
	102	5229.9978	-2200	Pass	

Test mode:		802.11n(HT40)		Frequency(MHz):	5270
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5270.0079	7900	Pass	
35		5270.0032	3200	Pass	
25		5269.9963	-3700	Pass	
15		5269.9974	-2600	Pass	
5		5270.0039	3900	Pass	
0		5270.0034	3400	Pass	
20	138	5270.0033	3300	Pass	
	120	5270.0031	3100	Pass	
	102	5270.0039	3900	Pass	

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**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 190 of 193

Test mode:		802.11n(HT40)	Frequency(MHz):	5310
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5310.0100	10000	Pass
35		5310.0033	3300	Pass
25		5310.0040	4000	Pass
15		5310.0023	2300	Pass
5		5310.0021	2100	Pass
0		5310.0039	3900	Pass
20	138	5309.9967	-3300	Pass
	120	5310.0020	2000	Pass
	102	5310.0031	3100	Pass

Test mode:		802.11n(HT40)	Frequency(MHz):	5510
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5510.0085	8500	Pass
35		5510.0032	3200	Pass
25		5510.0044	4400	Pass
15		5510.0035	3500	Pass
5		5510.0023	2300	Pass
0		5510.0029	2900	Pass
20	138	5510.0039	3900	Pass
	120	5509.9987	-1300	Pass
	102	5510.0041	4100	Pass

Test mode:		802.11n(HT40)	Frequency(MHz):	5590
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result
45	120	5590.0111	11100	Pass
35		5590.0098	9800	Pass
25		5590.0083	8300	Pass
15		5590.0046	4600	Pass
5		5590.0032	3200	Pass
0		5590.0028	2800	Pass
20	138	5589.9958	-4200	Pass
	120	5589.9983	-1700	Pass
	102	5590.0037	3700	Pass



**SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch**

Report No.: SZEM150700437303
Page: 191 of 193

Test mode:		802.11n(HT40)		Frequency(MHz):	5670
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5670.0100	10000	Pass	
35		5670.0099	9900	Pass	
25		5670.0102	10200	Pass	
15		5670.0075	7500	Pass	
5		5669.9936	-6400	Pass	
0		5670.0044	4400	Pass	
20	138	5670.0043	4300	Pass	
	120	5670.0067	6700	Pass	
	102	5670.0047	4700	Pass	

Test mode:		802.11n(HT40)		Frequency(MHz):	5755
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5755.0273	27300	Pass	
35		5755.0120	12000	Pass	
25		5755.0117	11700	Pass	
15		5755.0096	9600	Pass	
5		5755.0035	3500	Pass	
0		5755.0075	7500	Pass	
20	138	5755.0046	4600	Pass	
	120	5755.0032	3200	Pass	
	102	5755.0063	6300	Pass	

Test mode:		802.11n(HT40)		Frequency(MHz):	5795
Temperature (°C)	Voltage(VAC)	Measurement Frequency(MHz)	Delta Frequency(Hz)	Result	
45	120	5794.9920	-8000	Pass	
35		5794.9967	-3300	Pass	
25		5795.0041	4100	Pass	
15		5795.0032	3200	Pass	
5		5795.0029	2900	Pass	
0		5795.0067	6700	Pass	
20	138	5795.0057	5700	Pass	
	120	5794.9977	-2300	Pass	
	102	5794.9951	-4900	Pass	

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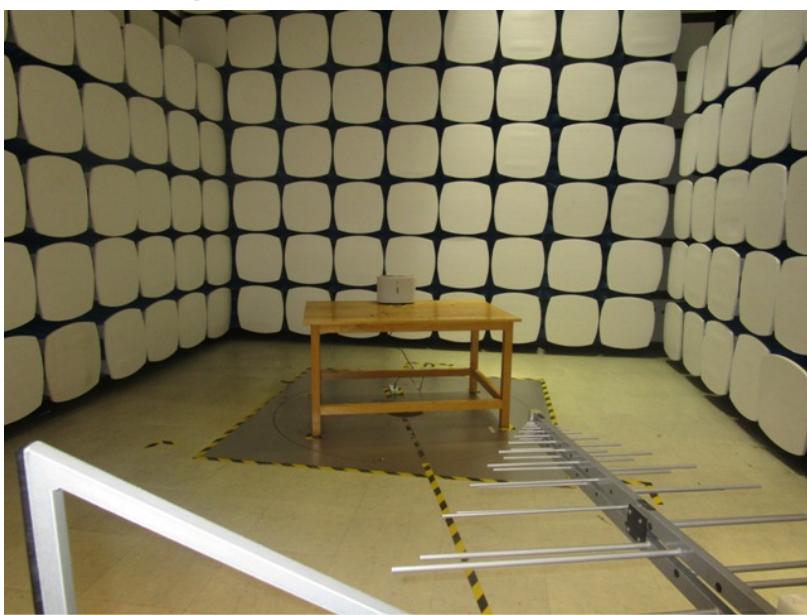
7 Photographs - EUT Test Setup

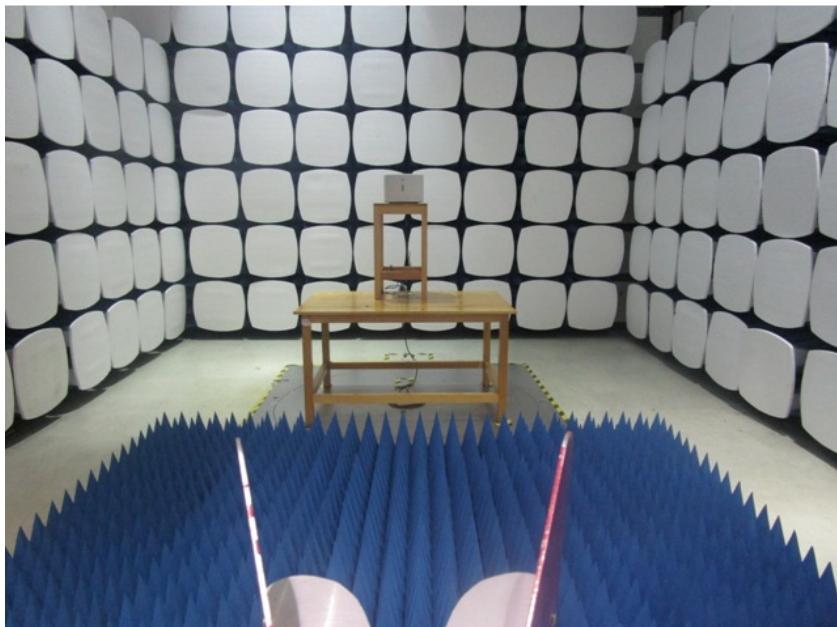
Test model No.: OMNI S6

7.1 Conducted Emission



7.2 Radiated Spurious Emission





8 Photographs - EUT Constructional Details

Refer to Appendix A - Photographs of EUT Constructional Details for SZEM1507004373CR.