



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

No. 1 Workshop, M-10, Middle section, Science & Technology Park,
Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053
Fax: +86 (0) 755 2671 0594
Email: ee.shenzhen@sgs.com

Report No.: SZEM161000852204
Page: 1 of 544

FCC REPORT

Application No: SZEM1610008522RG
Applicant: Huawei Technologies Co.,Ltd.
Manufacturer: Huawei Technologies Co.,Ltd.
Factory: Huawei Technologies Co.,Ltd.
Product Name: Mobile WiFi
Model No.(EUT): 601HW
Trade Mark:: HUAWEI
FCC ID: QIS601HW
Standards: 47 CFR Part 15, Subpart E (2015)
Date of Receipt: 2016-10-09
Date of Test: 2016-10-13 to 2016-10-23
Date of Issue: 2016-11-25

Test Result:	PASS *
---------------------	---------------

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

Authorized Signature:

Derek Yang
Wireless 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.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



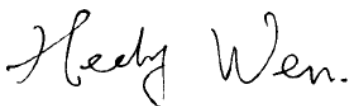
SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM161000852204

Page: 2 of 544

2 Version

Revision Record				
Version	Chapter	Date	Modifier	Remark
00		2016-11-23		Original

Authorized for issue by:			
Tested By		 (David Chen) /Project Engineer	2016-10-20
			Date
Prepared By		 (Hedy Wen) /Clerk	2016-11-24
			Date
Checked By		 (Jim Huang) /Reviewer	2016-11-25
			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
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



4 Contents

	Page
1 COVER 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 MEASUREMENT UNCERTAINTY (95% CONFIDENCE LEVELS, K=2)	10
5.11 EQUIPMENT LIST	11
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	23
6.5 POWER SPECTRAL DENSITY.....	197
6.6 RADIATED SPURIOUS EMISSIONS.....	284
6.6.1 Radiated emission below 1GHz	285
6.6.2 Transmitter emission above 1GHz.....	287
6.7 RESTRICTED BANDS AROUND FUNDAMENTAL FREQUENCY.....	350
7 PHOTOGRAPHS - EUT TEST SETUP DETAILS.....	544



5 General Information

5.1 Client Information

Applicant:	Huawei Technologies Co.,Ltd.
Address of Applicant:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C
Manufacturer:	Huawei Technologies Co.,Ltd.
Address of Manufacturer:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C
Factory:	Huawei Technologies Co.,Ltd.
Address of Factory:	Administration Building, Headquarters of Huawei Technologies Co., Ltd., Bantian, Longgang District, Shenzhen, 518129, P.R.C

5.2 General Description of EUT

Product Name:	Mobile WiFi
Model No.:	601HW
Trade Mark:	HUAWEI
Operation Frequency:	IEEE 802.11a/ n(HT20/40)/ac(HT20/40/80): 5150MHz to 5250MHz IEEE 802.11a/ n(HT20/40)/ac(HT20/40/80): 5250MHz to 5350MHz IEEE 802.11a/ n(HT20/40)/ac(HT20/40/80): 5470MHz to 5725MHz * The 5600-5650MHz can not be used.
Type of Modulation:	IEEE 802.11a: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE 802.11n: OFDM(BPSK/QPSK/16QAM/64QAM) IEEE 802.11ac: OFDM (BPSK/QPSK/16QAM/64QAM/256QAM)
Sample Type:	Portable Device
Antenna Type:	PIFA
Antenna Gain:	Antenna 0:2.7dBi, Antenna 1: 2.7dBi
EUT Power Supply:	DC3.8V (1 x 3.8V Rechargeable battery) 2400mAh Battery: Charge by DC 5V
AC adaptor:	Adaptor: Model No.: HW-050200U01 Input: AC100-240V 50/60Hz 0.5A Output:DC5V 2.0A



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

Report No.: SZEM161000852204

Page: 6 of 544

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/ac 20MHz	The Lowest channel	5180
	The Middle channel	5220
	The Highest channel	5240
IEEE 802.11n/ac 40MHz	The Lowest channel	5190
	The Highest channel	5230
IEEE 802.11ac 80MHz	The Middle channel	5210

For UNII Band II-A:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/n/ac 20MHz	The Lowest channel	5260
	The Middle channel	5300
	The Highest channel	5320
IEEE 802.11n/ac 40MHz	The Lowest channel	5270
	The Highest channel	5310
IEEE 802.11ac 80MHz	The Middle channel	5290



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

Report No.: SZEM161000852204

Page: 7 of 544

For UNII Band II-C:

Mode	Channel	Frequency(MHz)
IEEE 802.11a/n/ac 20MHz	The Lowest channel	5500
	The Middle channel	5600
	The Highest channel	5700
IEEE 802.11n/ac 40MHz	The Lowest channel	5510
	The Middle channel	5590
	The Highest channel	5670
IEEE 802.11ac 80MHz	The Lowest channel	5530
	The Highest channel	5610



5.3 Test Environment and Mode

Operating Environment:	
Temperature:	25.0 °C
Humidity:	55 % RH
Atmospheric Pressure:	1010 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,
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.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 3816.01.

- **VCCI**

The 10m Semi-anechoic chamber and Shielded Room 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 and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

5.7 Deviation from Standards

None.

5.8 Abnormalities from Standard Conditions

None.

5.9 Other Information Requested by the Customer

None



5.10 Measurement Uncertainty (95% confidence levels, k=2)

No.	Item	Measurement Uncertainty
1	Total RF power, conducted	0.75dB
2	RF power density, conducted	2.84dB
3	Spurious emissions, conducted	0.75dB
4	Radiated Spurious emission test	4.5dB (30MHz-1GHz)
		4.8dB (1GHz-25GHz)
5	Conduct emission test	3.12 dB(9KHz- 30MHz)
6	Temperature test	1°C
7	Humidity test	3%
8	DC and low frequency voltages	0.5%



5.11 Equipment List

Conducted Emission						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
1	Shielding Room	ZhongYu Electron	GB-88	SEM001-06	2016-05-13	2017-05-13
2	LISN	Rohde & Schwarz	ENV216	SEM007-01	2016-10-09	2017-10-09
3	LISN	ETS-LINDGREN	3816/2	SEM007-02	2016-04-25	2017-04-25
4	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T8- 02	EMC0120	2016-09-28	2017-09-28
5	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T4- 02	EMC0121	2016-09-28	2017-09-28
6	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T2- 02	EMC0122	2016-09-28	2017-09-28
7	EMI Test Receiver	Rohde & Schwarz	ESCI	SEM004-02	2016-04-25	2017-04-25
8	DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2016-10-09	2017-10-09

RF connected test						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
1	DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2016-10-09	2017-10-09
2	Spectrum Analyzer	Rohde & Schwarz	FSP	SEM004-06	2016-10-09	2017-10-09
3	Signal Generator	Rohde & Schwarz	SML03	SEM006-02	2016-04-25	2017-04-25
4	Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2016-10-09	2017-10-09



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

Report No.: SZEM161000852204

Page: 12 of 544

RE in Chamber						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2016-05-13	2017-05-13
2	EMI Test Receiver	Agilent Technologies	N9038A	SEM004-05	2016-10-09	2017-10-09
3	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-01	2014-11-01	2017-11-01
4	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEM003-11	2015-10-17	2018-10-17
5	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEM003-12	2014-11-24	2017-11-24
6	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEM005-01	2016-04-25	2017-04-25
7	Band filter	Amindeon	Asi 3314	SEM023-01	N/A	N/A
8	DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2016-10-09	2017-10-09
9	Loop Antenna	Beijing Daze	ZN30401	SEM003-09	2015-05-13	2018-05-13

RE in Chamber						
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2016-05-13	2017-05-13
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	SEM004-04	2016-04-25	2017-04-25
3	BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-02	2014-11-15	2017-11-15
4	Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2016-10-09	2017-10-09
5	Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2015-06-14	2018-06-14
6	Horn Antenna (18-26GHz)	ETS-Lindgren	3160	SEM003-12	2014-11-24	2017-11-24
7	Horn Antenna(26GHz-40GHz)	A.H.Systems, inc.	SAS-573	SEM003-13	2015-02-12	2018-02-12
8	Low Noise Amplifier	Black Diamond Series	BDLNA-0118-352810	SEM005-05	2016-10-09	2017-10-09
9	Band filter	Amindeon	Asi 3314	SEM023-01	N/A	N/A



6 Test results and Measurement Data

6.1 Antenna Requirement

Test Requirement:	47 CFR Part 15 Section 15.203
The antenna is integrated antenna and no consideration of replacement. The best case gain of the antenna is 2.7dBi.	



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

Report No.: SZEM161000852204

Page: 15 of 544

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.
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.

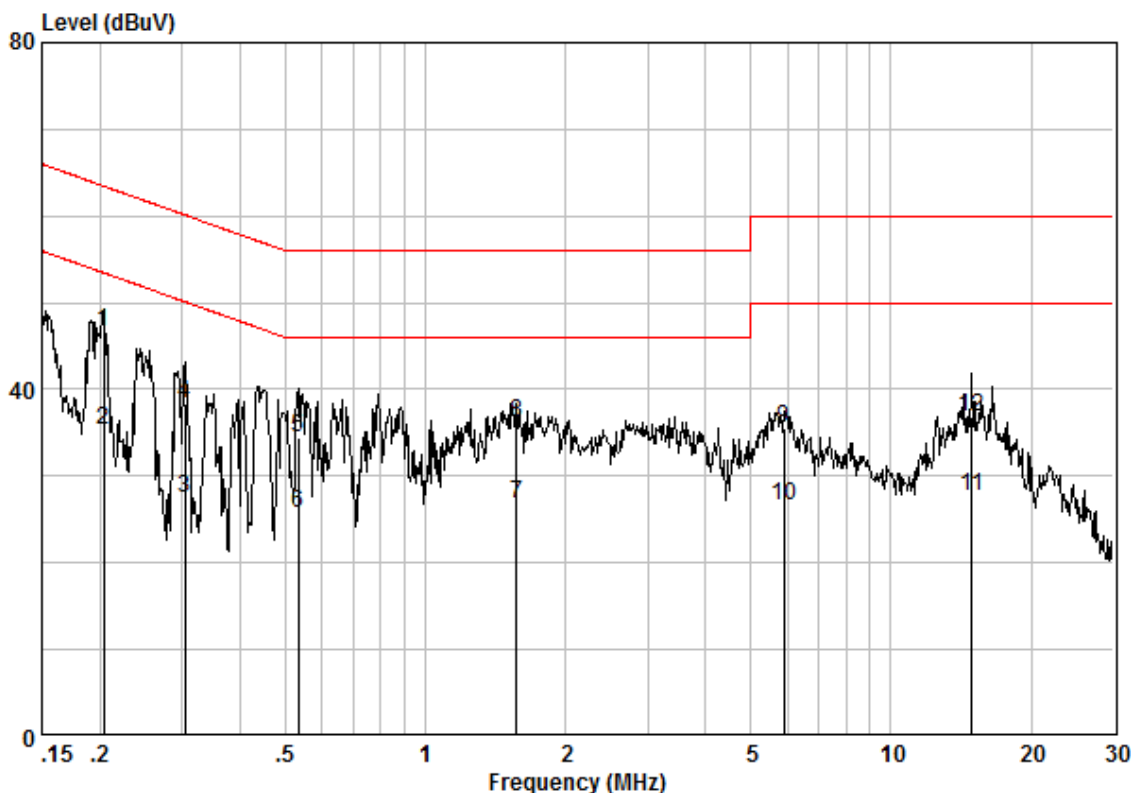


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM161000852204

Page: 16 of 544

Live Line:



Site : Shielding Room
Condition : CE LINE
Job No. : 8522RG
Test Mode : 5G TX

	Freq	Cable Loss	LISN Factor	Read Level	Limit Level	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB
1 @	0.20396	0.02	9.60	37.11	46.73	63.45	-16.71 QP
2	0.20396	0.02	9.60	25.78	35.40	53.45	-18.05 AVERAGE
3	0.30509	0.02	9.59	17.85	27.46	50.10	-22.65 AVERAGE
4	0.30509	0.02	9.59	28.79	38.40	60.10	-21.70 QP
5	0.53215	0.02	9.60	24.80	34.42	56.00	-21.58 QP
6	0.53215	0.02	9.60	16.13	25.74	46.00	-20.26 AVERAGE
7	1.568	0.03	9.59	17.23	26.84	46.00	-19.16 AVERAGE
8	1.568	0.03	9.59	26.64	36.26	56.00	-19.74 QP
9	5.898	0.05	9.66	25.77	35.49	60.00	-24.51 QP
10	5.898	0.05	9.66	16.85	26.56	50.00	-23.44 AVERAGE
11	14.907	0.16	9.76	17.72	27.63	50.00	-22.37 AVERAGE
12	14.907	0.16	9.76	26.92	36.84	60.00	-23.16 QP

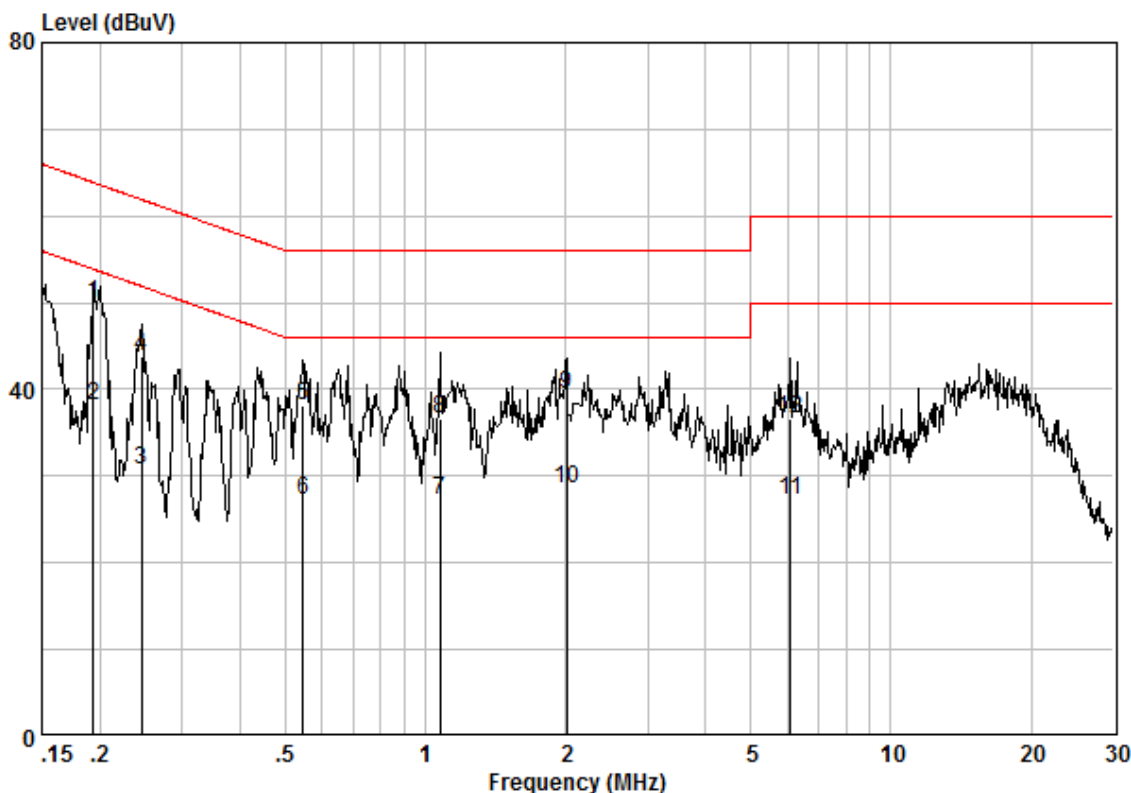


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM161000852204

Page: 17 of 544

Neutral Line:



Site : Shielding Room
Condition : CE NEUTRAL
Job No. : 8522RG
Test Mode : 5G TX

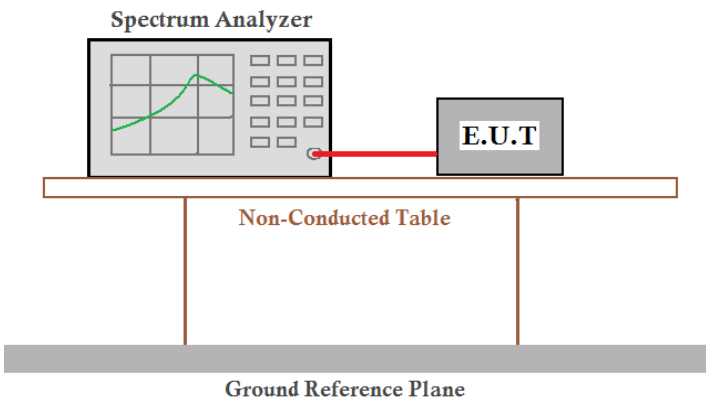
	Freq	Cable Loss	LISN Factor	Read Level	Limit Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1 @	0.19344	0.02	9.62	40.23	49.87	63.89	-14.02	QP
2 @	0.19344	0.02	9.62	28.60	38.24	53.89	-15.65	AVERAGE
3	0.24552	0.02	9.61	21.17	30.80	51.91	-21.10	AVERAGE
4	0.24552	0.02	9.61	34.08	43.71	61.91	-18.19	QP
5	0.54644	0.02	9.63	28.41	38.06	56.00	-17.94	QP
6	0.54644	0.02	9.63	17.70	27.35	46.00	-18.65	AVERAGE
7	1.077	0.03	9.65	17.56	27.24	46.00	-18.76	AVERAGE
8	1.077	0.03	9.65	26.95	36.63	56.00	-19.37	QP
9 @	2.012	0.03	9.66	29.75	39.45	56.00	-16.55	QP
10	2.012	0.03	9.66	18.81	28.50	46.00	-17.50	AVERAGE
11	6.089	0.05	9.73	17.50	27.28	50.00	-22.72	AVERAGE
12	6.089	0.05	9.73	26.73	36.52	60.00	-23.48	QP

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> Offset the High-Frequency cable loss 2dB in the spectrum analyzer.	
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); MCS0 of rate is the worst case of 802.11ac(HT20); MCS0 of rate is the worst case of 802.11ac(HT40); MCS0 of rate is the worst case of 802.11ac(HT80) 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 $11 + 10\log B$
	*Where B is the 26dB emission bandwidth in MHz	
Test Results:	Pass	



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

Report No.: SZEM161000852204

Page: 19 of 544

Measurement Data:

802.11a mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5180	13.03	11.95	24.00	Pass
5220	12.96	12.25	24.00	Pass
5240	12.93	12.22	24.00	Pass
5260	12.66	11.80	24.00	Pass
5300	12.22	11.95	24.00	Pass
5320	11.96	11.86	24.00	Pass
5500	12.61	12.47	24.00	Pass
5600	12.54	12.81	24.00	Pass
5700	12.46	12.94	24.00	Pass

802.11n(HT20) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5180	10.69	10.66	24.00	Pass
5220	10.44	10.43	24.00	Pass
5240	10.38	10.34	24.00	Pass
5260	10.33	10.31	24.00	Pass
5300	10.28	10.26	24.00	Pass
5320	10.32	10.34	24.00	Pass
5500	10.30	10.25	24.00	Pass
5600	10.15	10.10	24.00	Pass
5700	10.02	9.97	24.00	Pass



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

Report No.: SZEM161000852204

Page: 20 of 544

802.11ac(HT20) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5180	9.81	9.79	24.00	Pass
5220	9.49	9.46	24.00	Pass
5240	9.50	9.50	24.00	Pass
5260	9.48	9.43	24.00	Pass
5300	9.45	9.42	24.00	Pass
5320	9.40	9.39	24.00	Pass
5500	9.36	9.35	24.00	Pass
5600	9.23	9.23	24.00	Pass
5700	9.20	9.15	24.00	Pass

802.11 n(HT40) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5190	11.92	11.87	24.00	Pass
5230	11.49	11.49	24.00	Pass
5270	11.49	11.48	24.00	Pass
5310	11.43	11.42	24.00	Pass
5510	11.39	11.34	24.00	Pass
5590	11.34	11.31	24.00	Pass
5670	11.25	11.23	24.00	Pass

802.11 ac(HT40) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5190	9.57	9.54	24.00	Pass
5230	9.33	9.31	24.00	Pass
5270	9.32	9.28	24.00	Pass
5310	9.29	9.25	24.00	Pass
5510	9.27	9.23	24.00	Pass
5590	9.24	9.22	24.00	Pass
5670	9.15	9.11	24.00	Pass

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <http://www.sgs.com/en/Terms-and-Conditions/Terms-e-Documents.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



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

Report No.: SZEM161000852204

Page: 21 of 544

802.11ac(HT80) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5210	9.48	9.47	24.00	Pass
5290	9.38	9.34	24.00	Pass
5530	9.32	9.28	24.00	Pass
5610	9.22	9.19	24.00	Pass

MIMO

802.11n(HT20) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5180	11.65	10.61	24.00	Pass
5220	11.66	10.62	24.00	Pass
5240	11.68	10.57	24.00	Pass
5260	11.21	10.26	24.00	Pass
5300	11.29	10.18	24.00	Pass
5320	10.83	9.85	24.00	Pass
5500	12.16	11.09	24.00	Pass
5600	11.78	11.43	24.00	Pass
5700	11.81	11.51	24.00	Pass

802.11ac(HT20) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5180	10.90	9.67	24.00	Pass
5220	10.84	9.56	24.00	Pass
5240	10.84	9.55	24.00	Pass
5260	10.11	9.75	24.00	Pass
5300	10.01	10.26	24.00	Pass
5320	9.78	9.74	24.00	Pass
5500	11.11	10.38	24.00	Pass
5600	10.77	10.82	24.00	Pass
5700	10.11	10.01	24.00	Pass



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

Report No.: SZEM161000852204

Page: 22 of 544

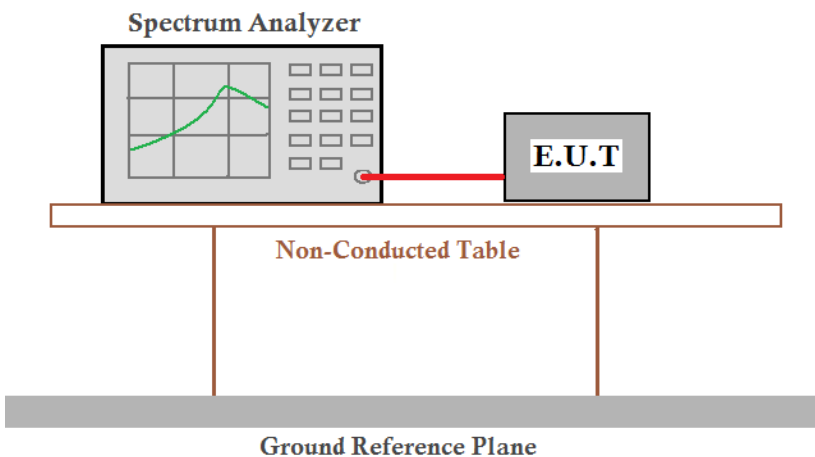
802.11 n(HT40) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5190	10.41	9.21	24.00	Pass
5230	10.37	9.19	24.00	Pass
5270	9.61	9.15	24.00	Pass
5310	9.14	9.27	24.00	Pass
5510	10.62	9.68	24.00	Pass
5590	10.41	10.05	24.00	Pass
5670	9.51	9.32	24.00	Pass

802.11 ac(HT40) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5190	10.31	9.25	24.00	Pass
5230	10.25	9.21	24.00	Pass
5270	9.41	9.11	24.00	Pass
5310	9.33	9.32	24.00	Pass
5510	10.31	9.61	24.00	Pass
5590	10.37	10.07	24.00	Pass
5670	10.25	10.06	24.00	Pass

802.11ac(HT80) mode				
Frequency (MHz)	Conducted Output Power (dBm)		Limit (dBm)	Result
	Antenna 0	Antenna 1		
5210	9.69	9.32	24.00	Pass
5290	9.02	8.66	24.00	Pass
5530	10.07	8.74	24.00	Pass
5610	10.09	9.78	24.00	Pass



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:	 The diagram illustrates the test setup. A Spectrum Analyzer is connected to an E.U.T (Equipment Under Test) via a red cable. Both the Spectrum Analyzer and the E.U.T are placed on a Non-Conducted Table. The table is supported by two vertical legs. Below the table is a Ground Reference Plane.
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); MCS0 of rate is the worst case of 802.11ac(HT20); MCS0 of rate is the worst case of 802.11ac(HT40); MCS0 of rate is the worst case of 802.11ac(HT80) Only the worst case is recorded in the report.
Limit:	No restriction limits
Test Results:	Pass



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

Report No.: SZEM161000852204

Page: 24 of 544

Measurement Data:

Antenna 0

802.11a mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	19.29	16.27
5220	19.07	16.28
5240	19.25	16.26
5260	19.12	16.27
5300	19.20	16.29
5320	18.83	16.25
5500	19.26	16.29
5600	18.99	16.28
5700	19.17	16.24

802.11n(HT20) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	22.27	17.86
5220	22.10	17.89
5240	22.35	17.89
5260	21.79	17.86
5300	22.14	17.89
5320	22.12	17.91
5500	22.22	17.90
5600	22.03	17.89
5700	22.15	17.88



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

Report No.: SZEM161000852204

Page: 25 of 544

802.11ac(HT20) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	21.97	17.93
5220	22.19	17.92
5240	22.07	17.91
5260	22.14	17.91
5300	22.64	18.08
5320	22.44	17.94
5500	22.54	17.94
5600	22.21	17.95
5700	22.17	17.94

802.11n(HT40) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	44.53	36.57
5230	45.23	36.50
5270	44.39	36.41
5310	44.84	36.58
5510	43.85	36.40
5590	44.62	36.53
5670	44.71	36.59

802.11ac(HT40) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	43.78	36.58
5230	44.09	36.50
5270	43.99	36.45
5310	44.10	36.57
5510	44.53	36.53
5590	44.73	36.43
5670	44.83	36.48



802.11ac(HT80) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5210	90.65	76.23
5290	92.37	76.21
5530	90.53	76.07
5610	92.09	76.27

MIMO

802.11n(HT20) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	22.54	17.99
5220	22.64	18.05
5240	22.26	17.96
5260	22.63	18.03
5300	22.69	18.02
5320	22.97	18.09
5500	22.79	18.04
5600	22.71	18.04
5700	22.75	18.03

802.11ac(HT20) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	22.45	18.00
5220	22.60	17.99
5240	22.41	17.93
5260	22.35	17.93
5300	22.35	17.95
5320	22.17	17.93
5500	22.41	17.97
5600	22.41	17.93
5700	22.21	17.91



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

Report No.: SZEM161000852204

Page: 27 of 544

802.11n(HT40) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	44.30	36.51
5230	43.97	36.60
5270	43.45	36.53
5310	43.60	36.57
5510	43.54	36.45
5590	44.20	36.63
5670	43.58	36.54

802.11ac(HT40) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	44.23	36.65
5230	44.44	36.67
5270	44.31	36.64
5310	44.30	36.56
5510	44.09	36.63
5590	44.74	36.65
5670	44.39	36.62

802.11ac(HT80) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5210	91.33	76.12
5290	90.98	76.14
5530	90.65	76.27
5610	89.38	75.94



Antenna 1

802.11a mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	19.21	16.28
5220	19.31	16.27
5240	19.24	16.27
5260	19.00	16.30
5300	19.23	16.28
5320	19.48	16.28
5500	19.06	16.28
5600	19.02	16.26
5700	19.23	16.29

802.11n(HT20) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	22.45	17.91
5220	22.10	17.89
5240	21.96	17.87
5260	22.38	17.92
5300	22.14	17.87
5320	22.22	17.88
5500	21.92	17.88
5600	22.23	17.86
5700	22.14	17.90



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

Report No.: SZEM161000852204

Page: 29 of 544

802.11ac(HT20) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	22.55	18.02
5220	22.33	17.97
5240	22.30	18.07
5260	22.37	17.97
5300	22.09	17.93
5320	22.33	17.95
5500	22.74	18.01
5600	22.370	17.95
5700	21.97	18.14

802.11n(HT40) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	39.82	35.79
5230	40.00	35.85
5270	39.79	35.81
5310	39.86	35.84
5510	40.01	35.77
5590	39.85	35.85
5670	39.71	35.79

802.11ac(HT40) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	44.14	36.44
5230	36.49	44.25
5270	43.99	36.43
5310	43.59	36.41
5510	44.50	36.53
5590	44.17	36.46
5670	44.20	36.51



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

Report No.: SZEM161000852204

Page: 30 of 544

802.11ac(HT80) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5210	92.20	76.15
5290	92.86	76.15
5530	91.42	76.30
5610	92.02	76.06

MIMO

802.11n(HT20) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	21.99	17.86
5220	22.17	17.93
5240	22.27	17.88
5260	22.89	17.98
5300	22.93	18.03
5320	22.56	17.99
5500	22.15	17.86
5600	22.15	17.91
5700	22.17	17.92

802.11ac(HT20) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5180	22.34	17.96
5220	22.47	17.95
5240	22.67	17.95
5260	22.82	17.92
5300	22.66	17.95
5320	22.16	17.85
5500	22.81	18.03
5600	22.57	17.98
5700	22.45	17.92



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

Report No.: SZEM161000852204

Page: 31 of 544

802.11n(HT40) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	43.82	36.56
5230	43.47	36.46
5270	43.50	36.48
5310	42.98	36.46
5510	43.623	36.43
5590	43.86	36.42
5670	43.69	36.44

802.11ac(HT40) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5190	44.60	36.61
5230	44.99	36.69
5270	44.58	36.65
5310	44.86	36.72
5510	45.01	36.69
5590	44.74	36.67
5670	44.80	36.67

802.11ac(HT80) mode		
Frequency (MHz)	26dB Emission Bandwidth (MHz)	99% Occupied Bandwidth (MHz)
5210	86.04	76.17
5290	86.07	76.16
5530	86.10	76.13
5610	85.07	76.06



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

Report No.: SZEM161000852204

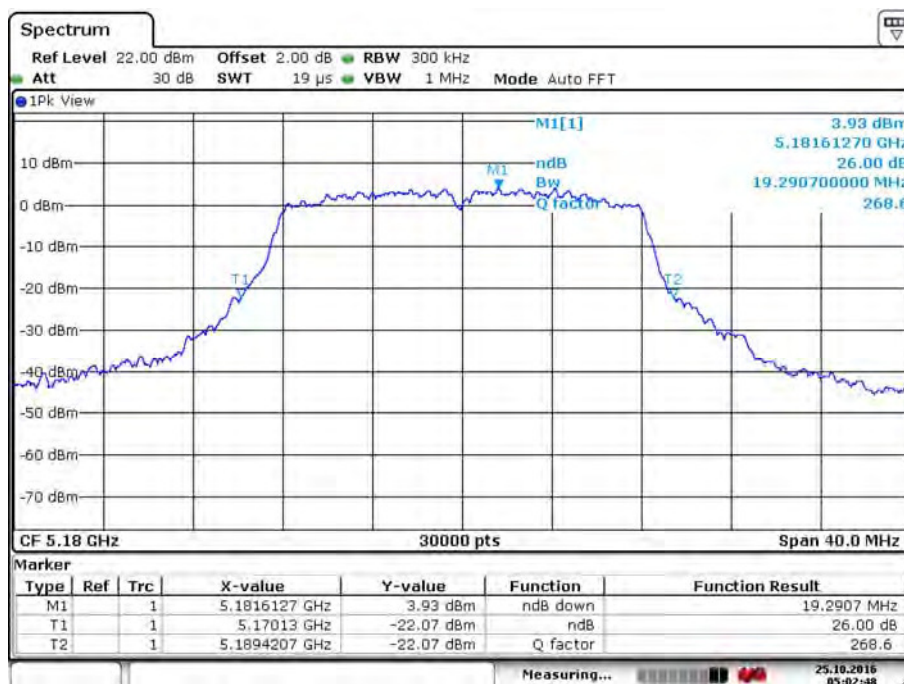
Page: 32 of 544

26dB Emission Bandwidth

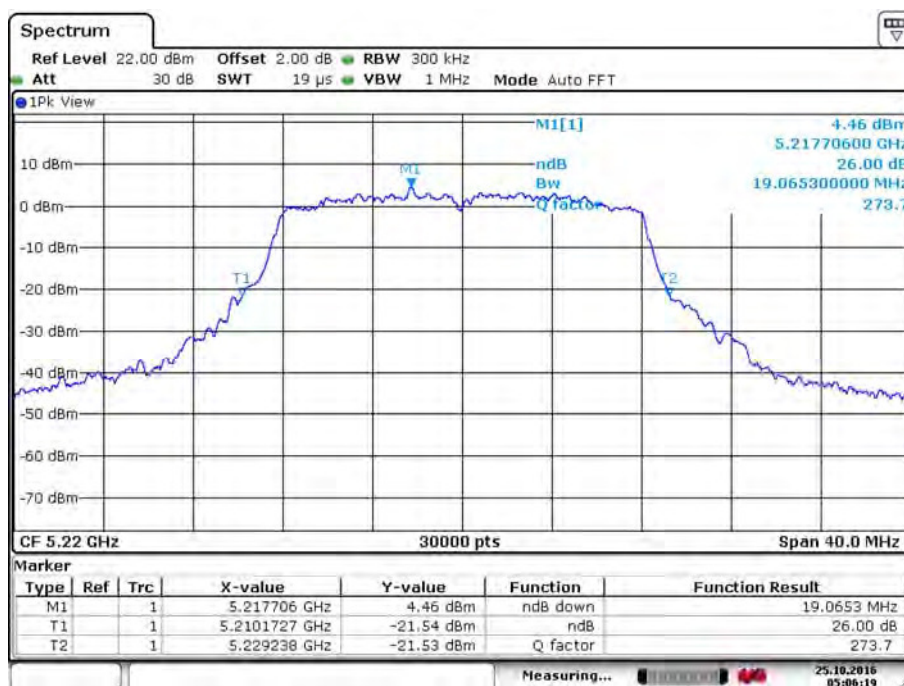
Test plot as follows:

Antenna 0

Test mode:	802.11a	Frequency(MHz):	5180
------------	---------	-----------------	------



Test mode:	802.11a	Frequency(MHz):	5220
------------	---------	-----------------	------



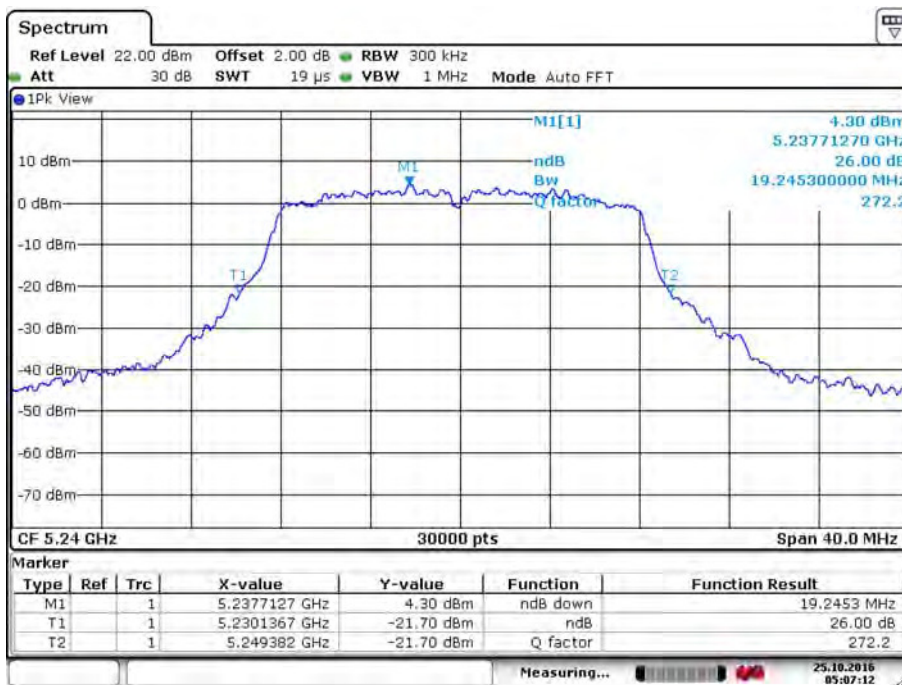


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

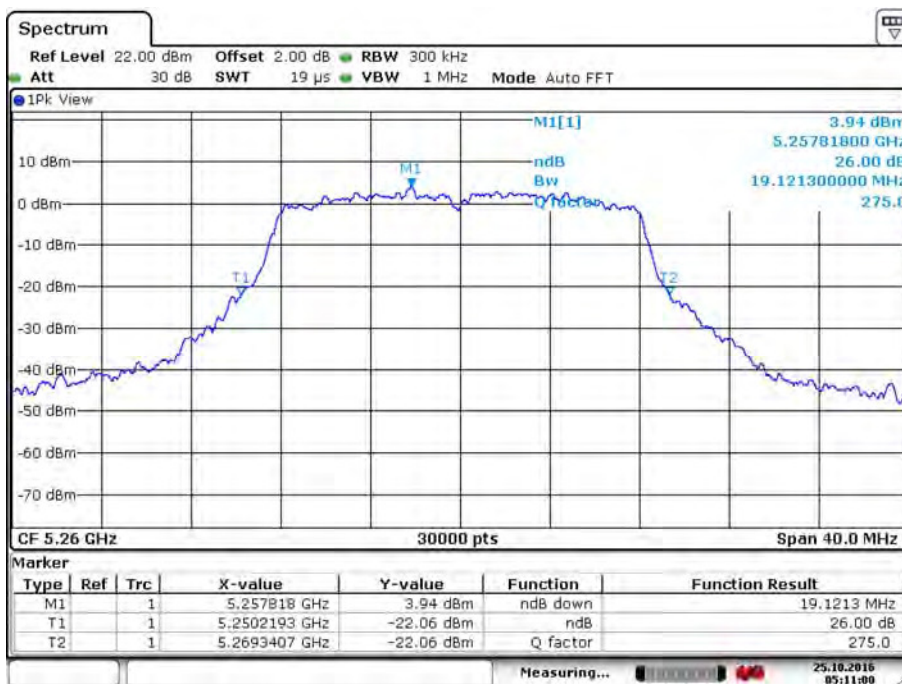
Report No.: SZEM161000852204

Page: 33 of 544

Test mode:	802.11a	Frequency(MHz):	5240
------------	---------	-----------------	------



Test mode:	802.11a	Frequency(MHz):	5260
------------	---------	-----------------	------



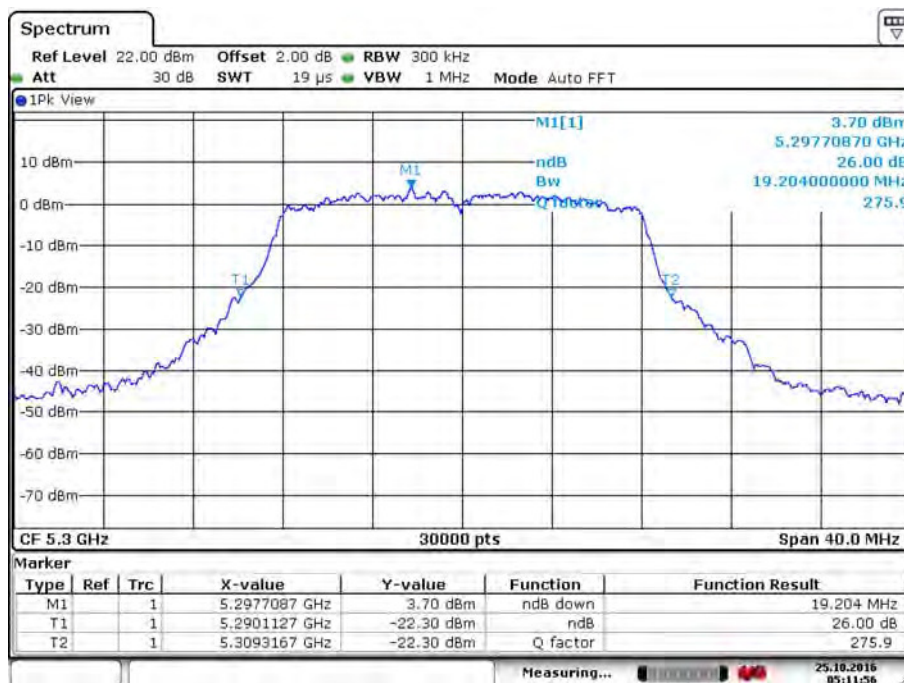


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

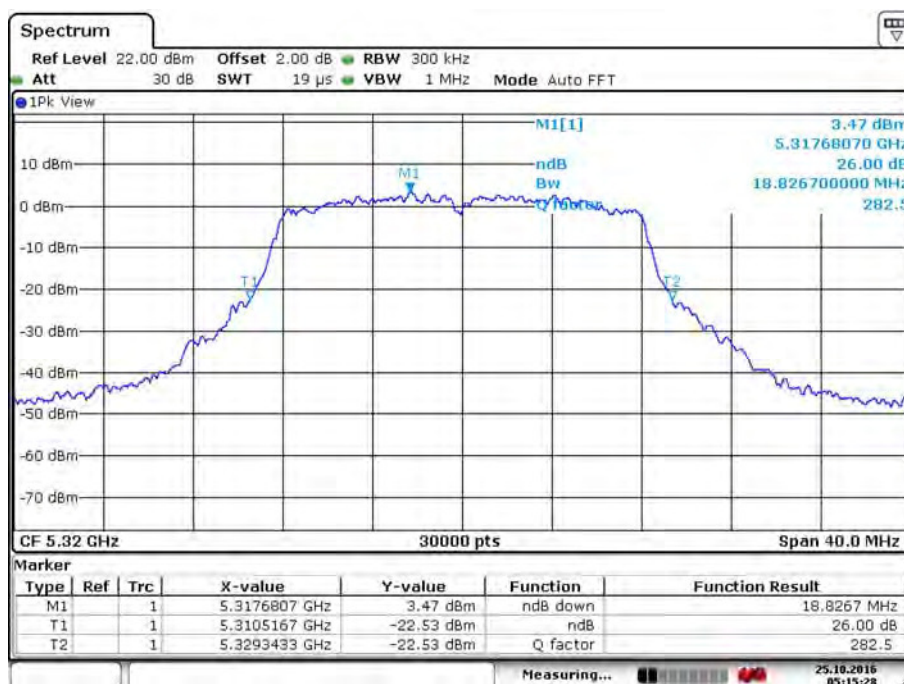
Report No.: SZEM161000852204

Page: 34 of 544

Test mode:	802.11a	Frequency(MHz):	5300
------------	---------	-----------------	------



Test mode:	802.11a	Frequency(MHz):	5320
------------	---------	-----------------	------





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

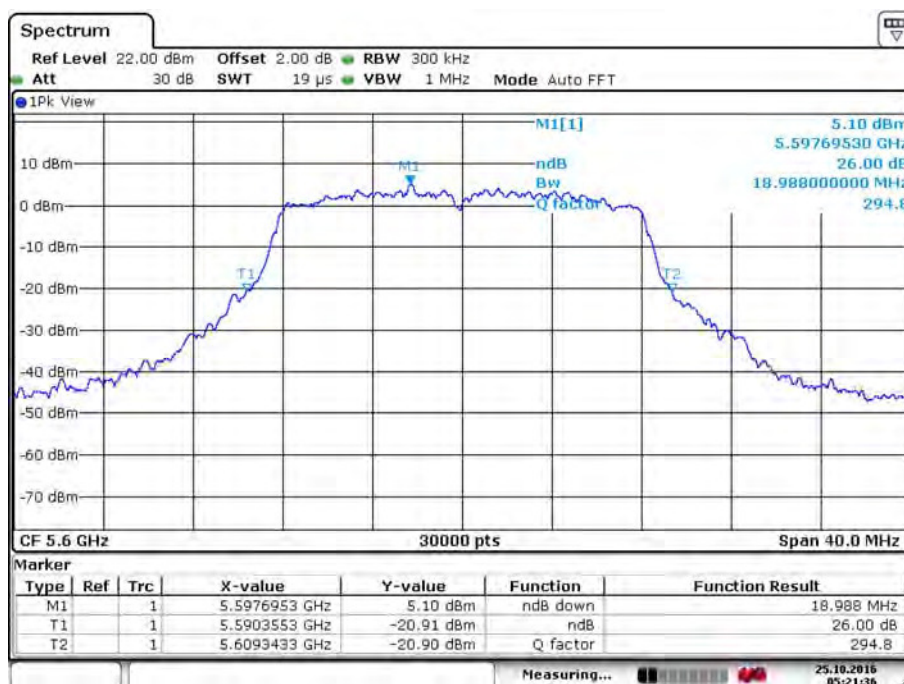
Report No.: SZEM161000852204

Page: 35 of 544

Test mode:	802.11a	Frequency(MHz):	5500
------------	---------	-----------------	------



Test mode:	802.11a	Frequency(MHz):	5600
------------	---------	-----------------	------



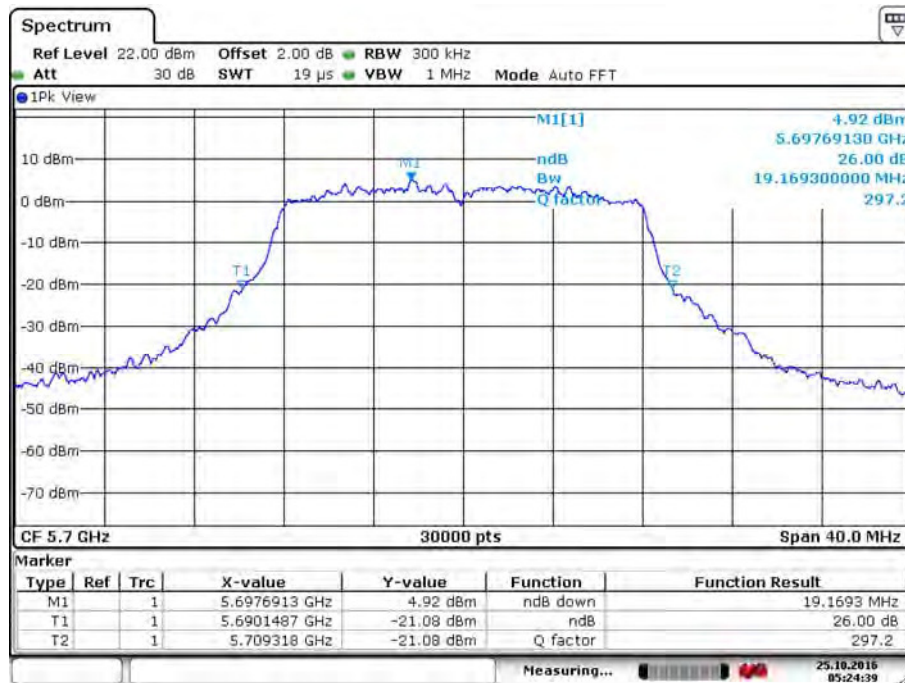


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

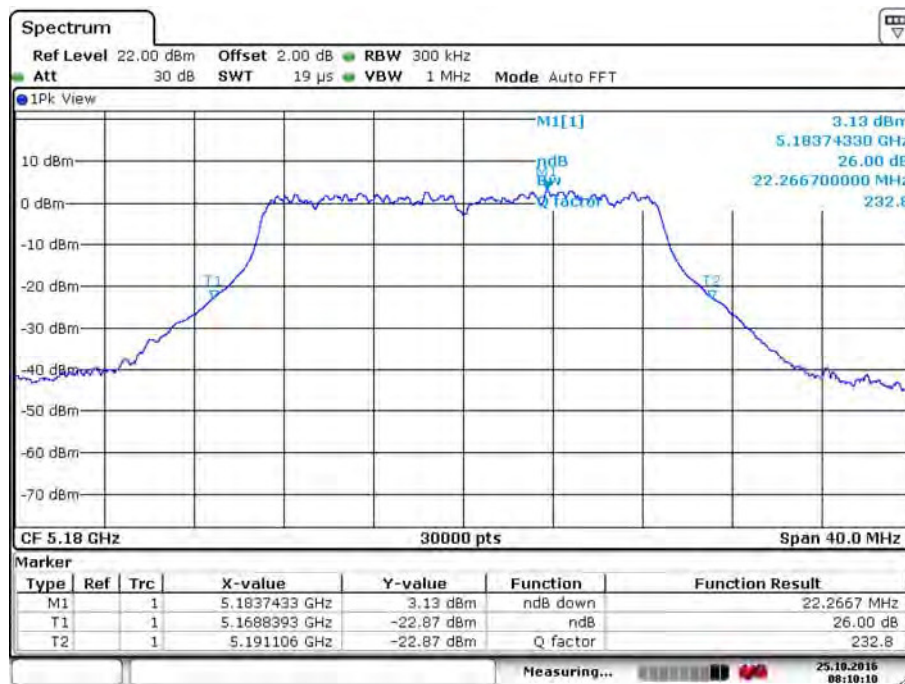
Report No.: SZEM161000852204

Page: 36 of 544

Test mode:	802.11a	Frequency(MHz):	5700
------------	---------	-----------------	------



Test mode:	802.11n(HT20)	Frequency(MHz):	5180
------------	---------------	-----------------	------



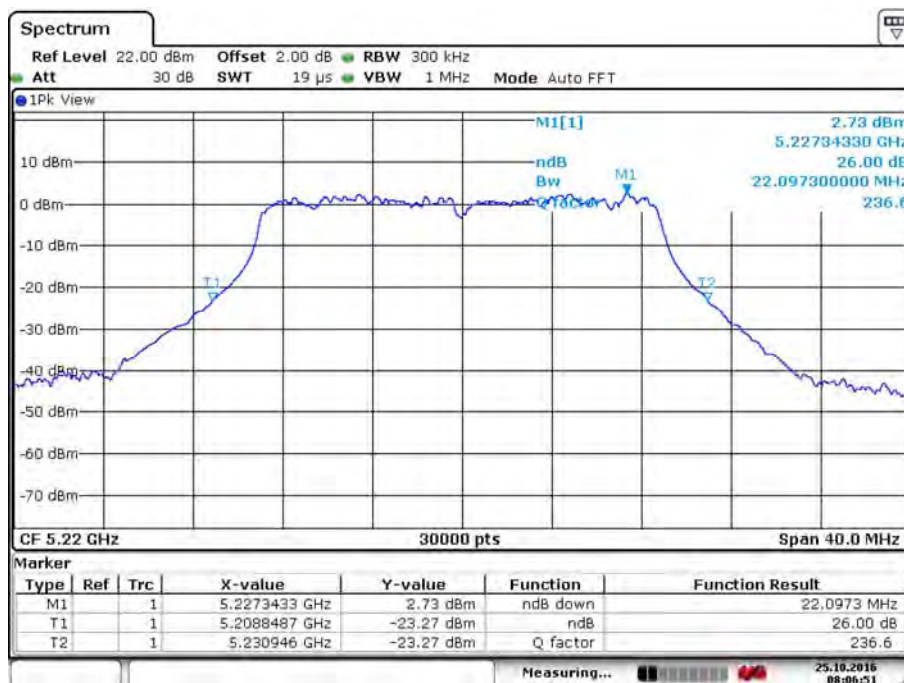


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

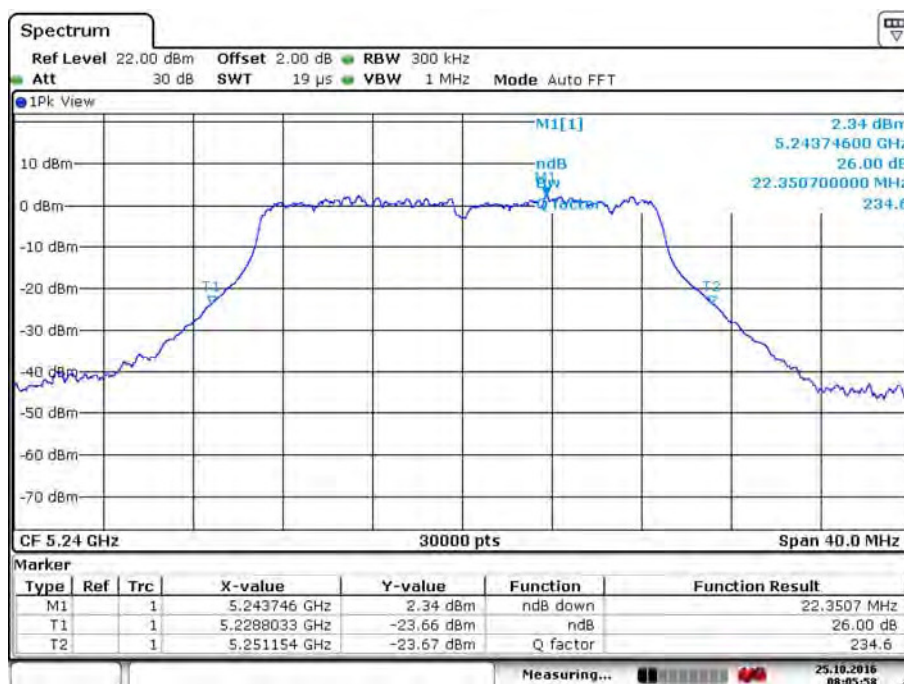
Report No.: SZEM161000852204

Page: 37 of 544

Test mode:	802.11n(HT20)	Frequency(MHz):	5220
------------	---------------	-----------------	------



Test mode:	802.11n(HT20)	Frequency(MHz):	5240
------------	---------------	-----------------	------



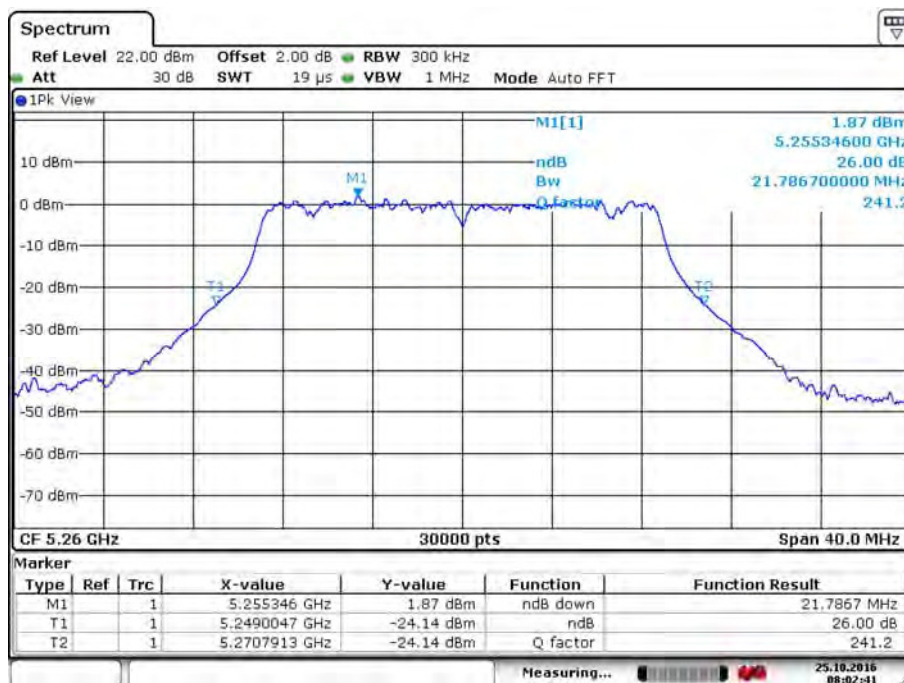


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

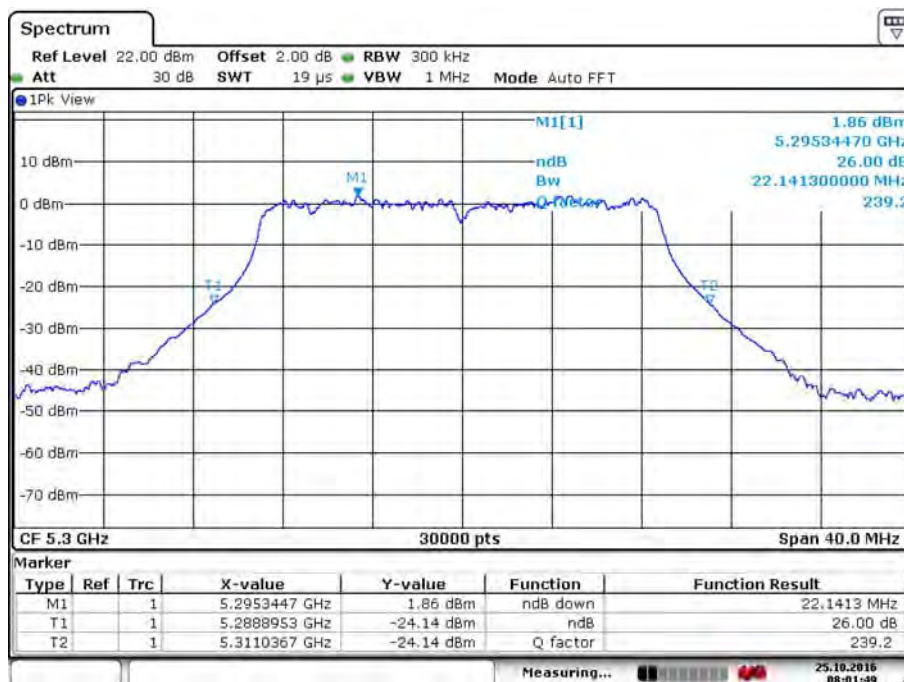
Report No.: SZEM161000852204

Page: 38 of 544

Test mode:	802.11n(HT20)	Frequency(MHz):	5260
------------	---------------	-----------------	------



Test mode:	802.11n(HT20)	Frequency(MHz):	5300
------------	---------------	-----------------	------



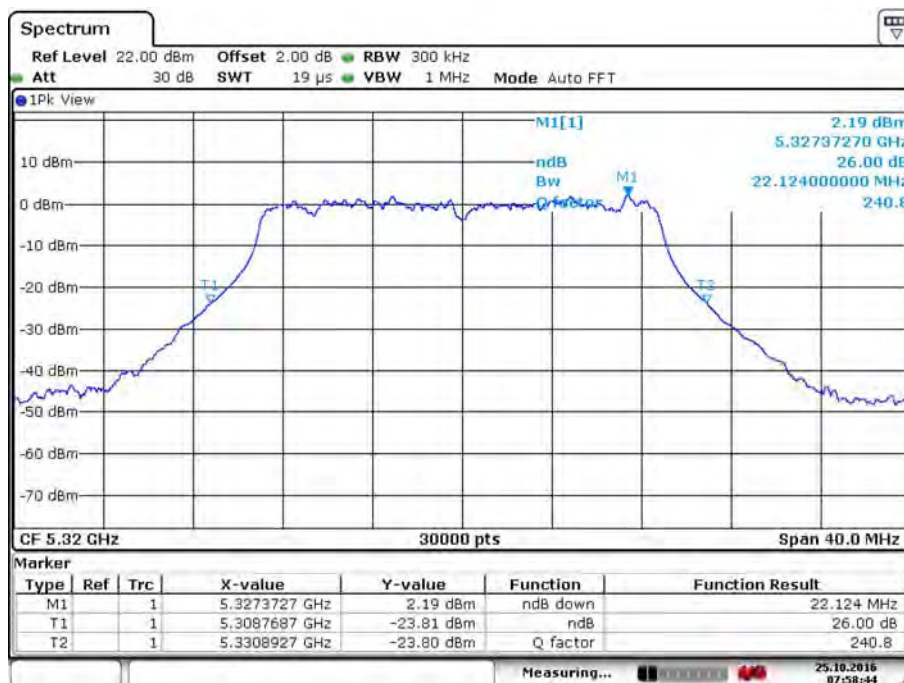


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

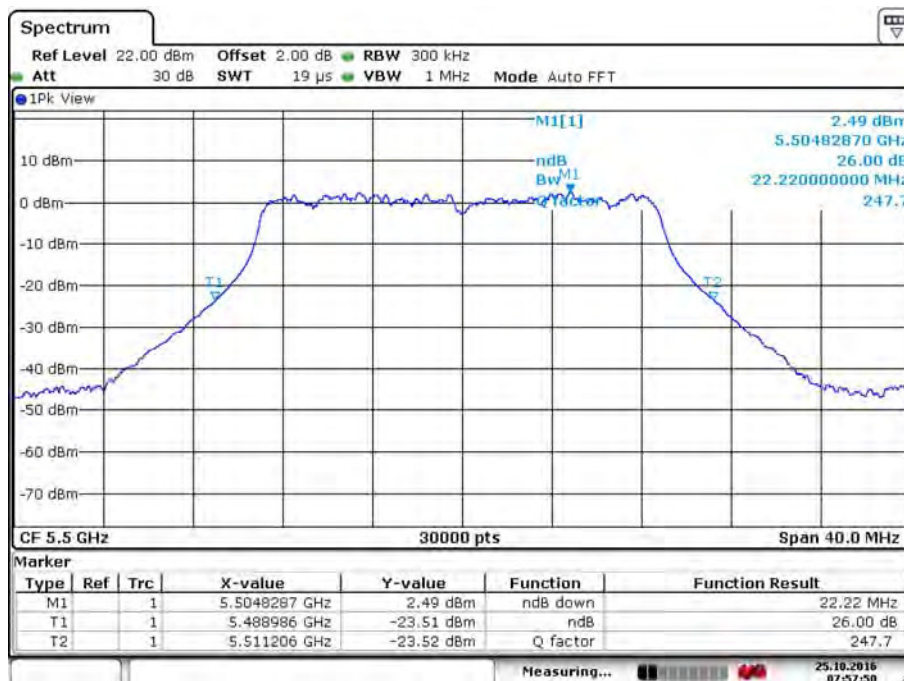
Report No.: SZEM161000852204

Page: 39 of 544

Test mode:	802.11n(HT20)	Frequency(MHz):	5320
------------	---------------	-----------------	------



Test mode:	802.11n(HT20)	Frequency(MHz):	5500
------------	---------------	-----------------	------



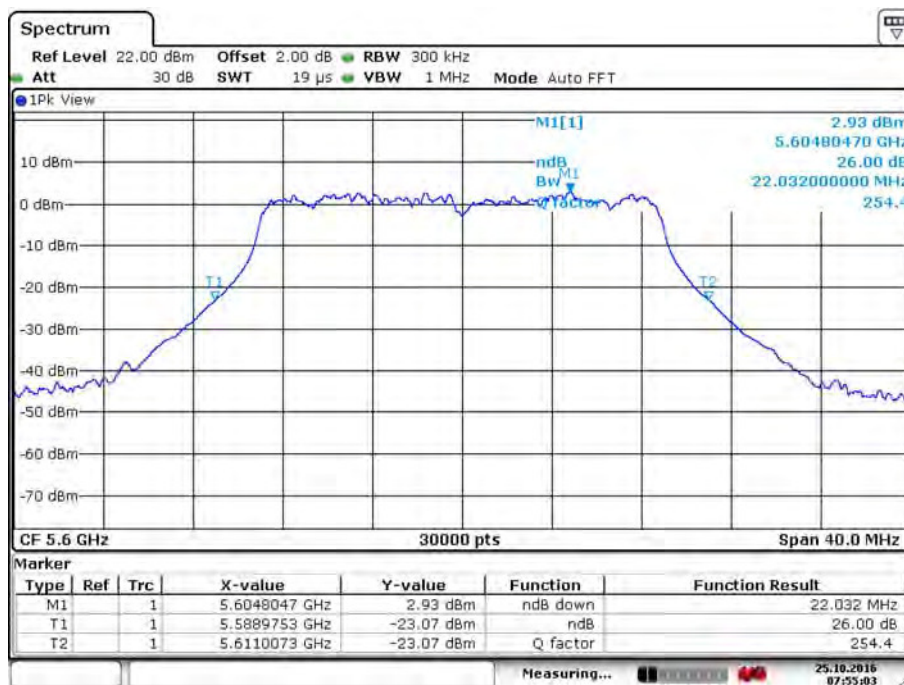


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

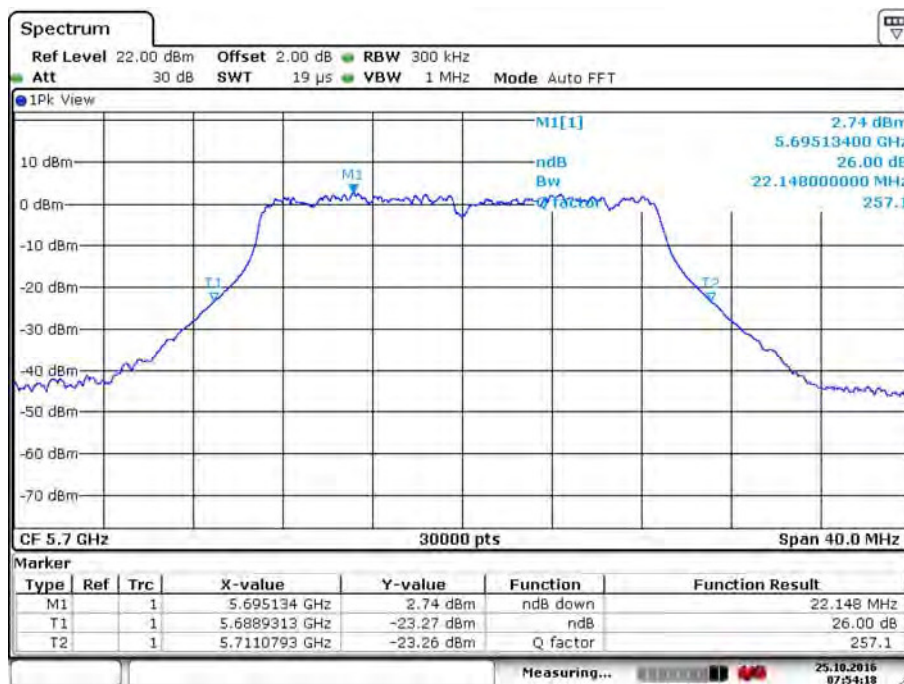
Report No.: SZEM161000852204

Page: 40 of 544

Test mode:	802.11n(HT20)	Frequency(MHz):	5600
------------	---------------	-----------------	------



Test mode:	802.11n(HT20)	Frequency(MHz):	5700
------------	---------------	-----------------	------



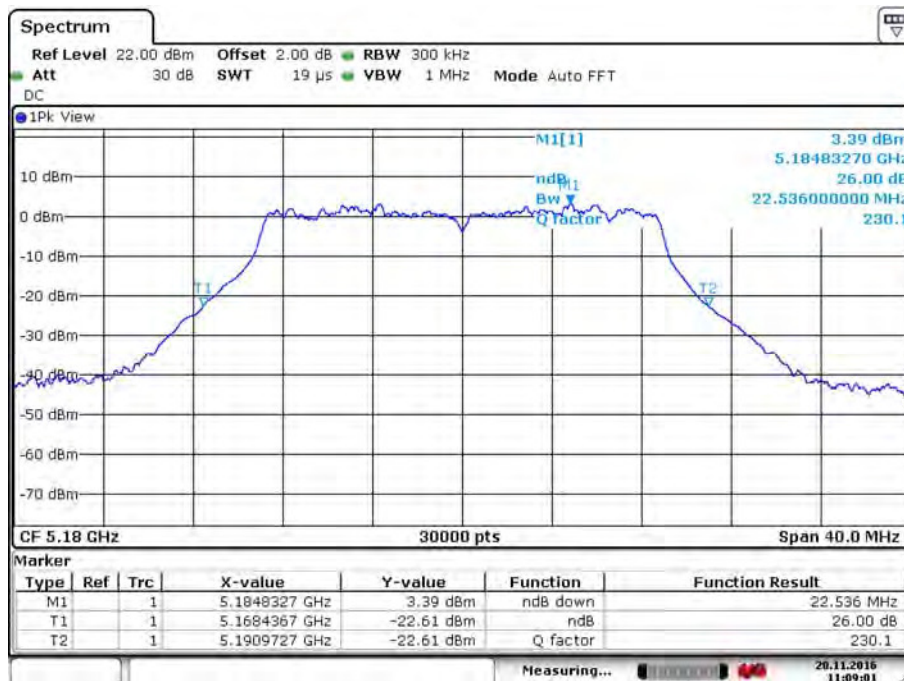


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

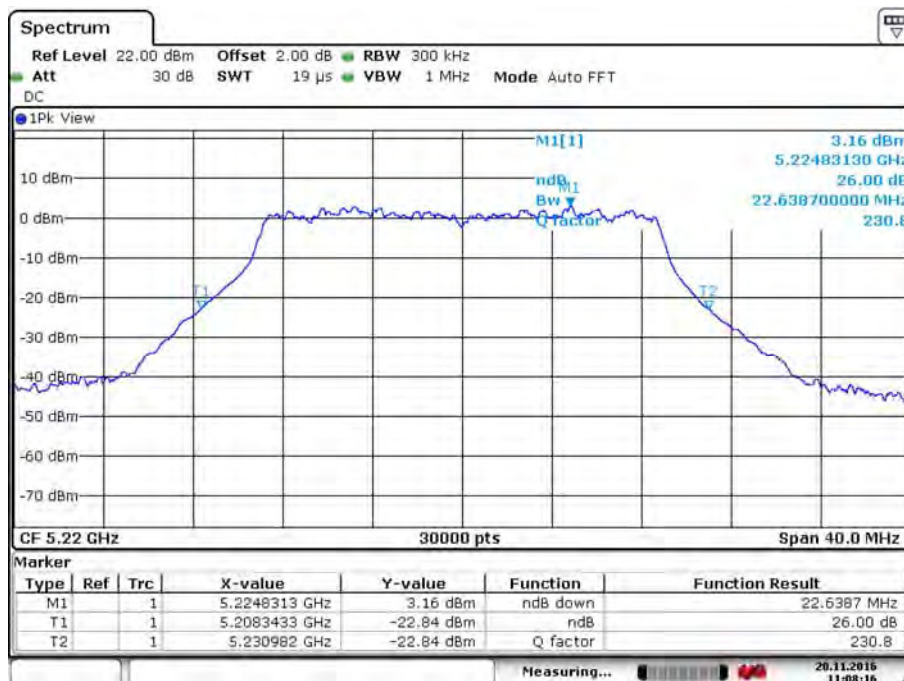
Report No.: SZEM161000852204

Page: 41 of 544

Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5180
------------	--------------------	-----------------	------



Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5220
------------	--------------------	-----------------	------



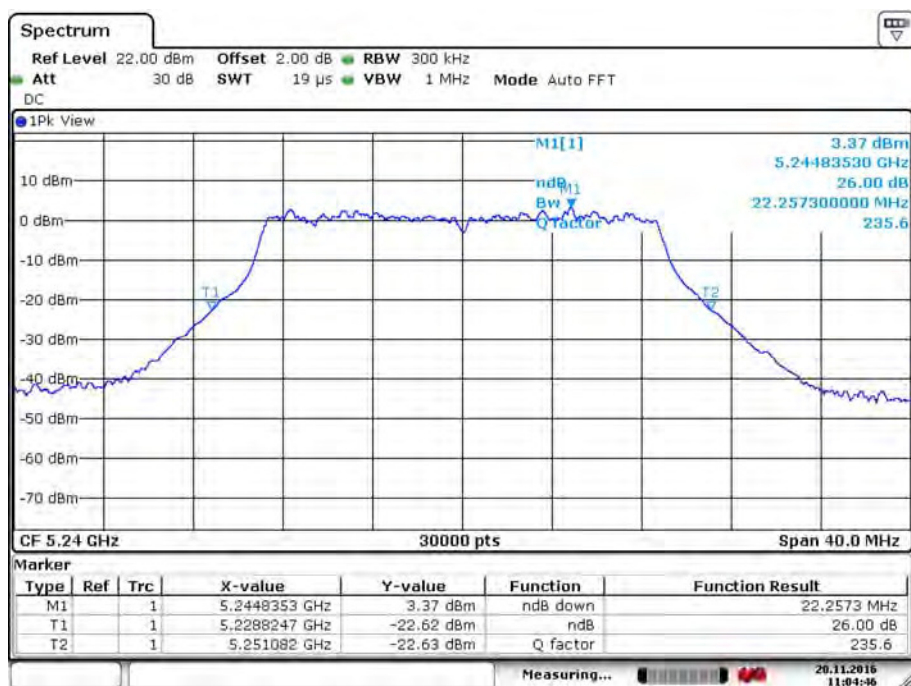


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

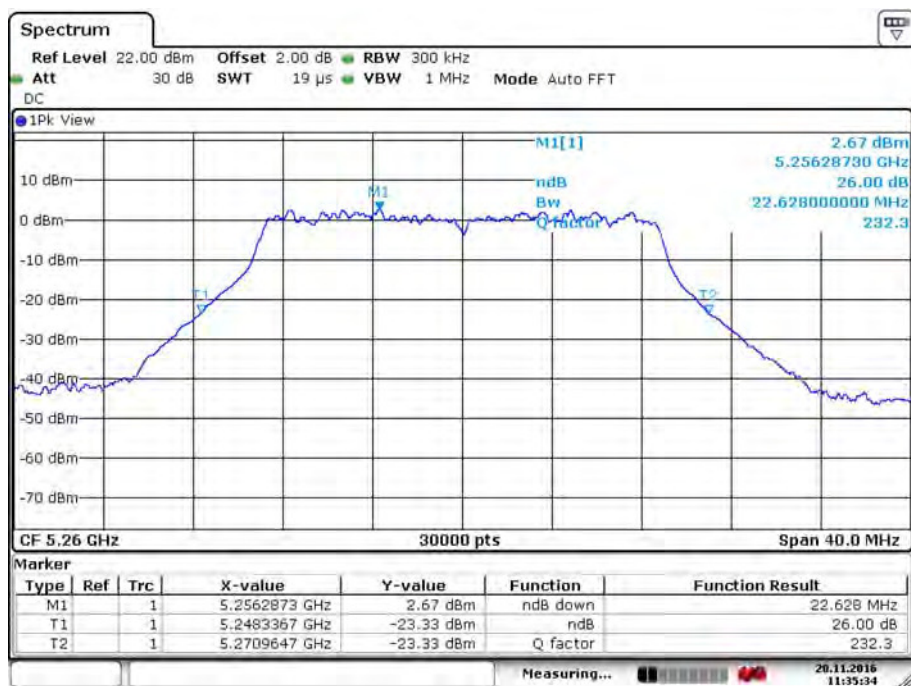
Report No.: SZEM161000852204

Page: 42 of 544

Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5240
------------	--------------------	-----------------	------



Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5260
------------	--------------------	-----------------	------



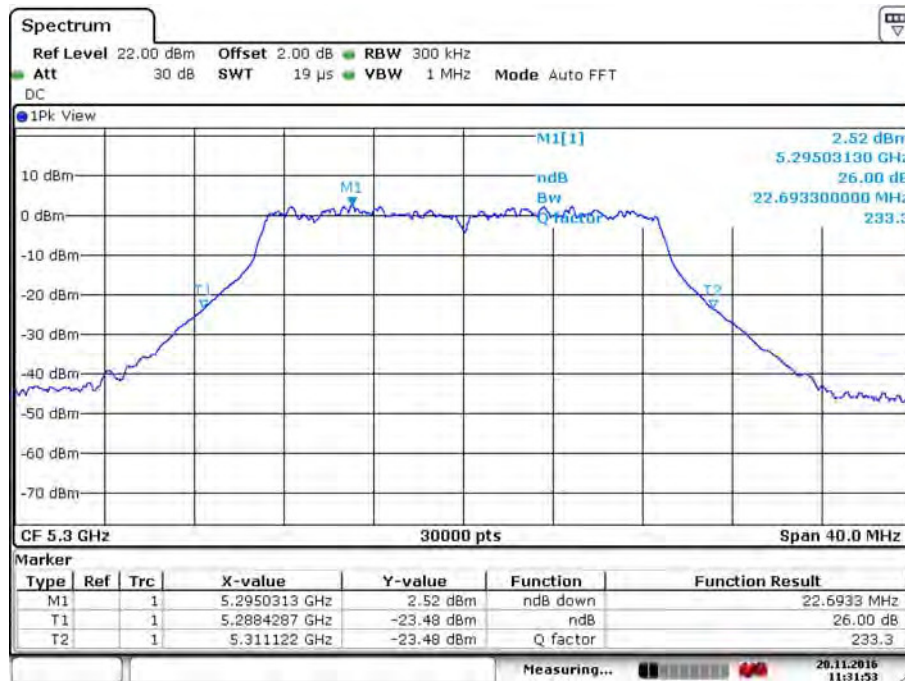


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

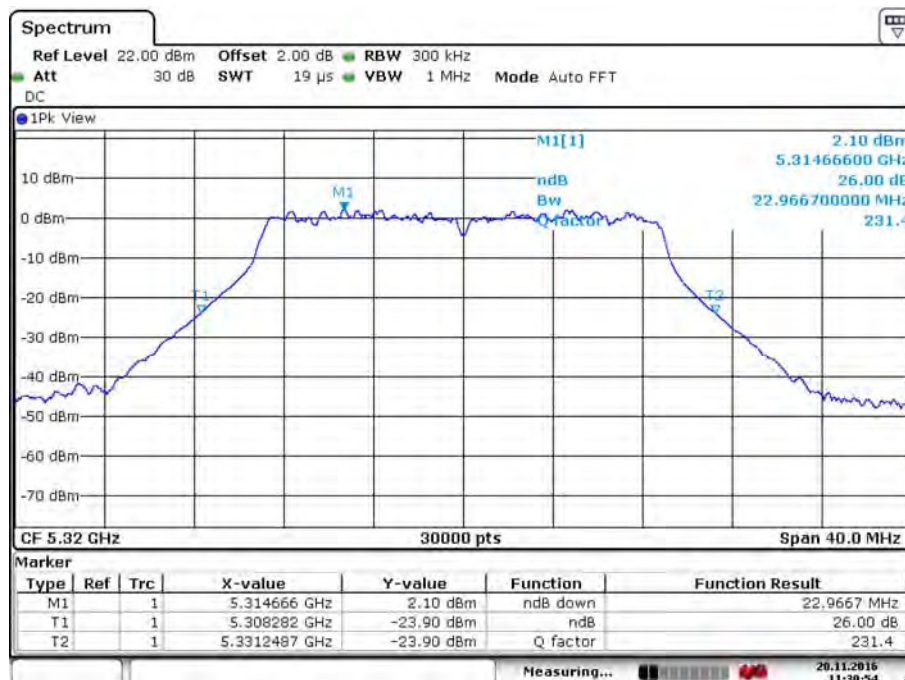
Report No.: SZEM161000852204

Page: 43 of 544

Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5300
------------	--------------------	-----------------	------



Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5320
------------	--------------------	-----------------	------



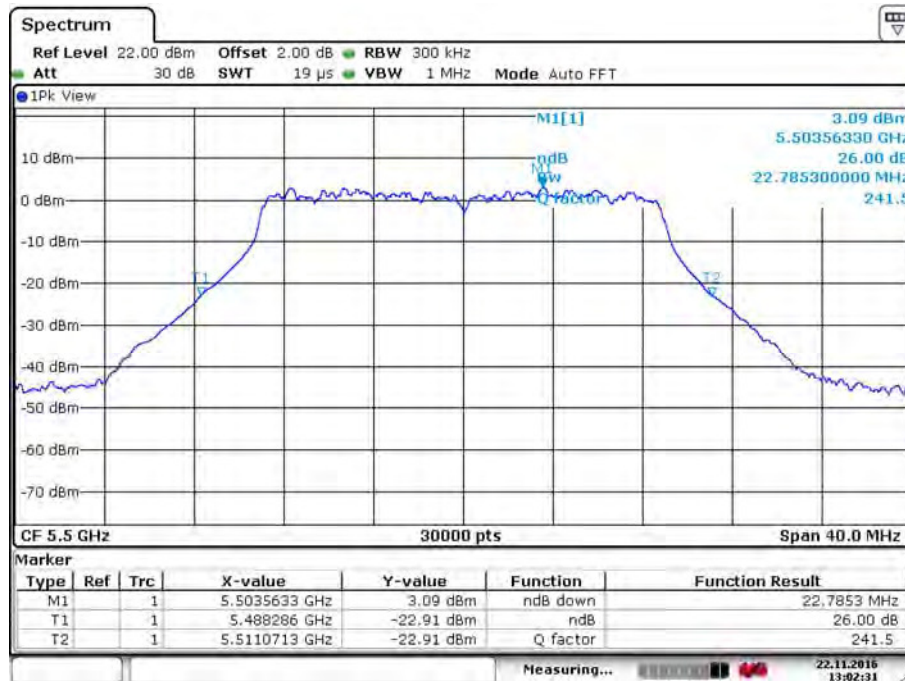


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

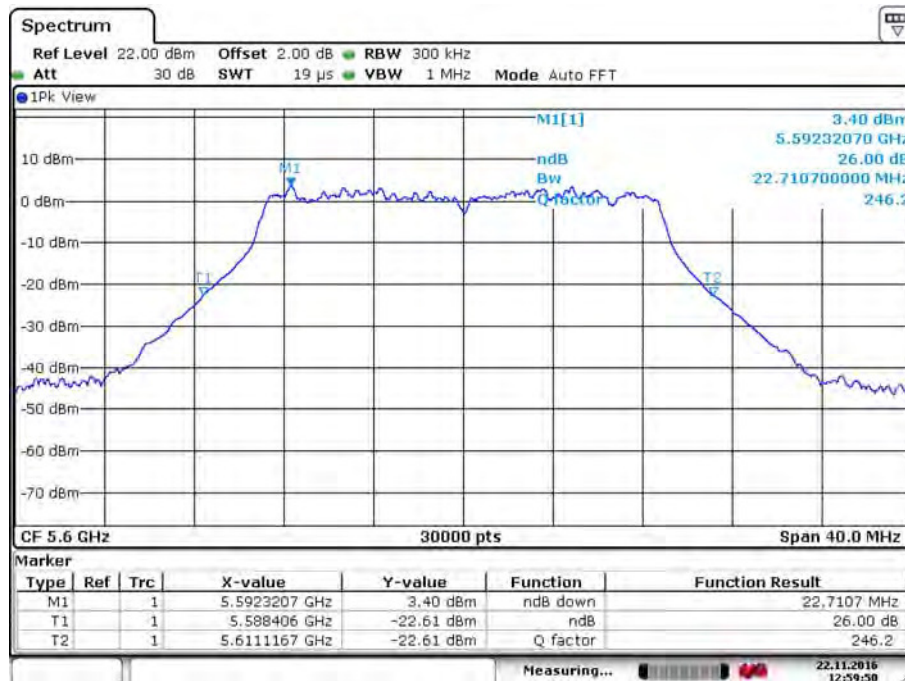
Report No.: SZEM161000852204

Page: 44 of 544

Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5500
------------	--------------------	-----------------	------



Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5600
------------	--------------------	-----------------	------



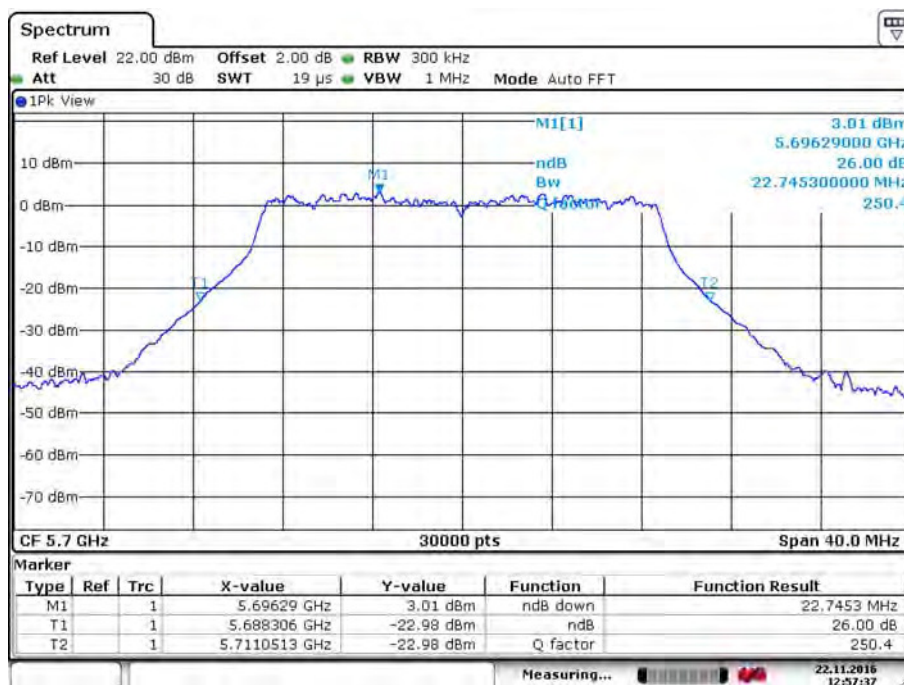


SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Report No.: SZEM161000852204

Page: 45 of 544

Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5700
------------	--------------------	-----------------	------



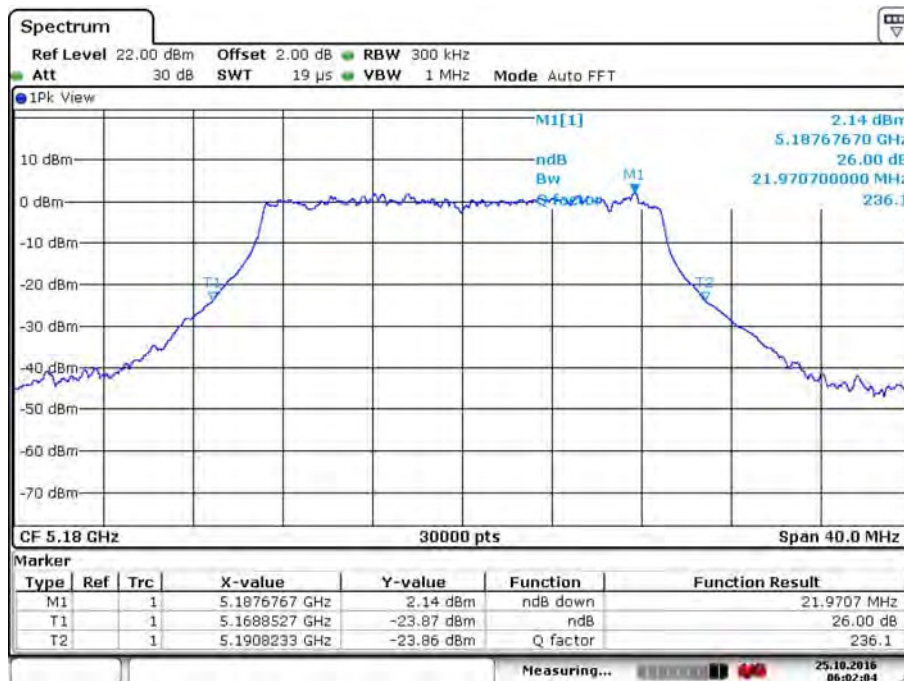


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

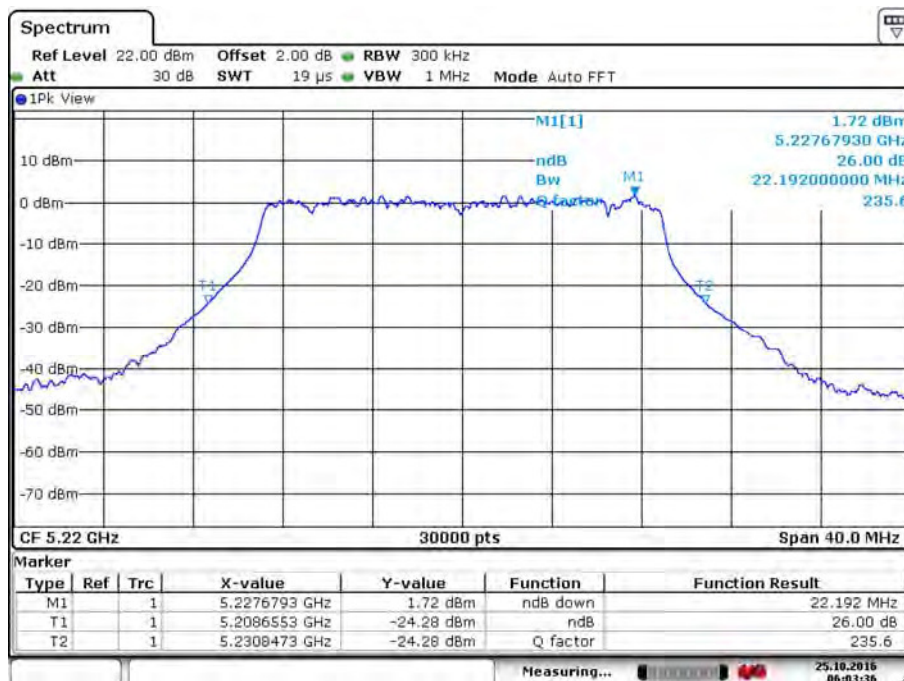
Report No.: SZEM161000852204

Page: 46 of 544

Test mode:	802.11ac(HT20)	Frequency(MHz):	5180
------------	----------------	-----------------	------



Test mode:	802.11ac(HT20)	Frequency(MHz):	5220
------------	----------------	-----------------	------



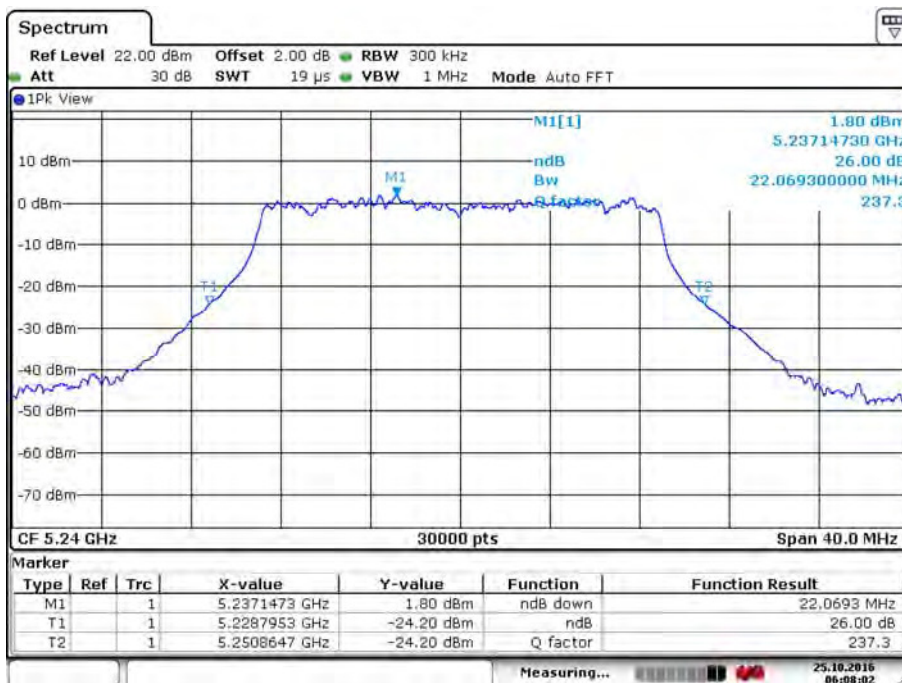


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

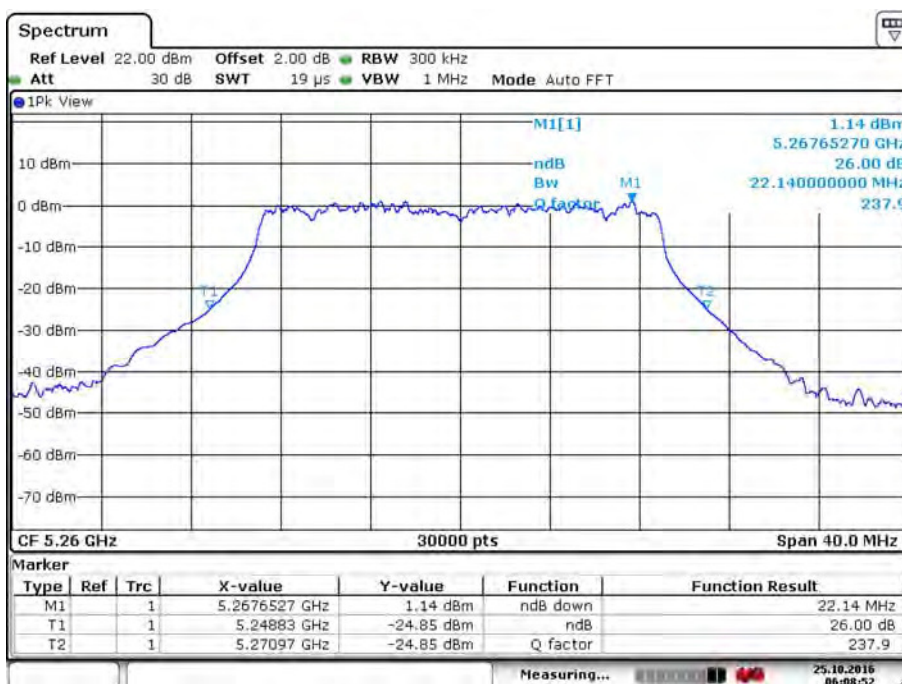
Report No.: SZEM161000852204

Page: 47 of 544

Test mode:	802.11ac(HT20)	Frequency(MHz):	5240
------------	----------------	-----------------	------



Test mode:	802.11ac(HT20)	Frequency(MHz):	5260
------------	----------------	-----------------	------



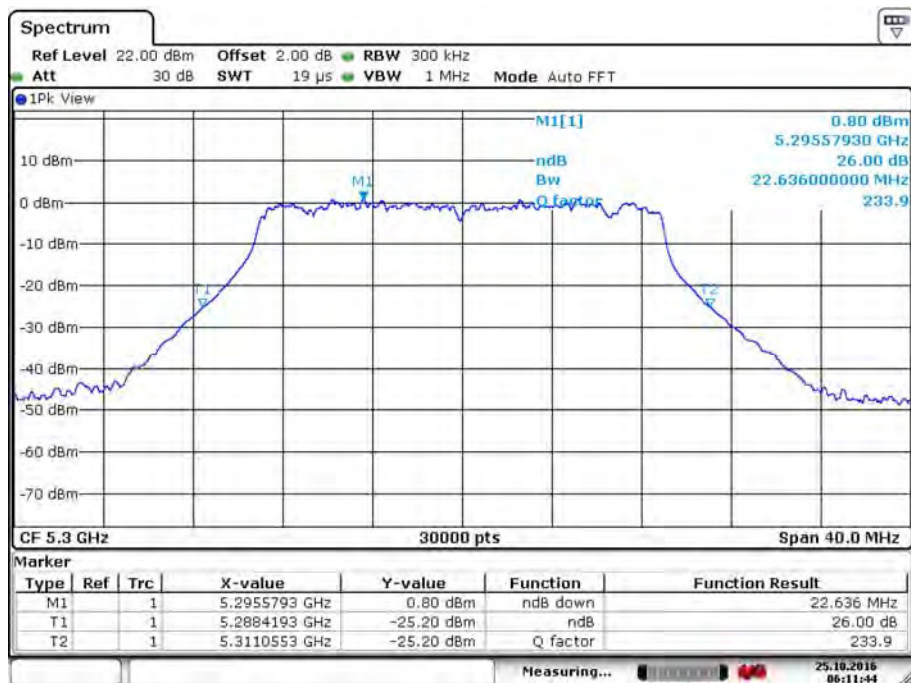


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

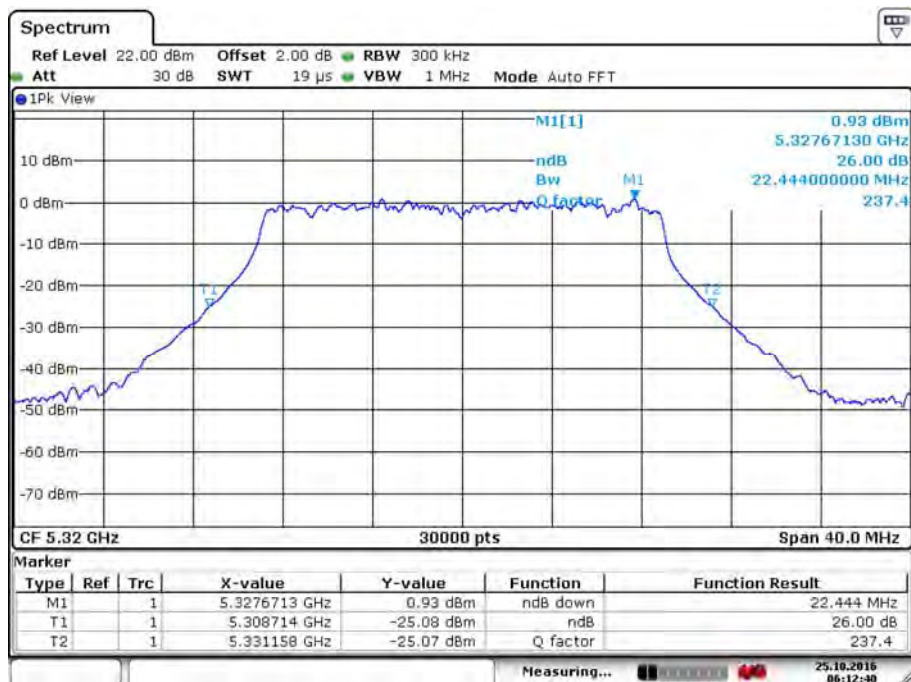
Report No.: SZEM161000852204

Page: 48 of 544

Test mode:	802.11ac(HT20)	Frequency(MHz):	5300
------------	----------------	-----------------	------



Test mode:	802.11ac(HT20)	Frequency(MHz):	5320
------------	----------------	-----------------	------



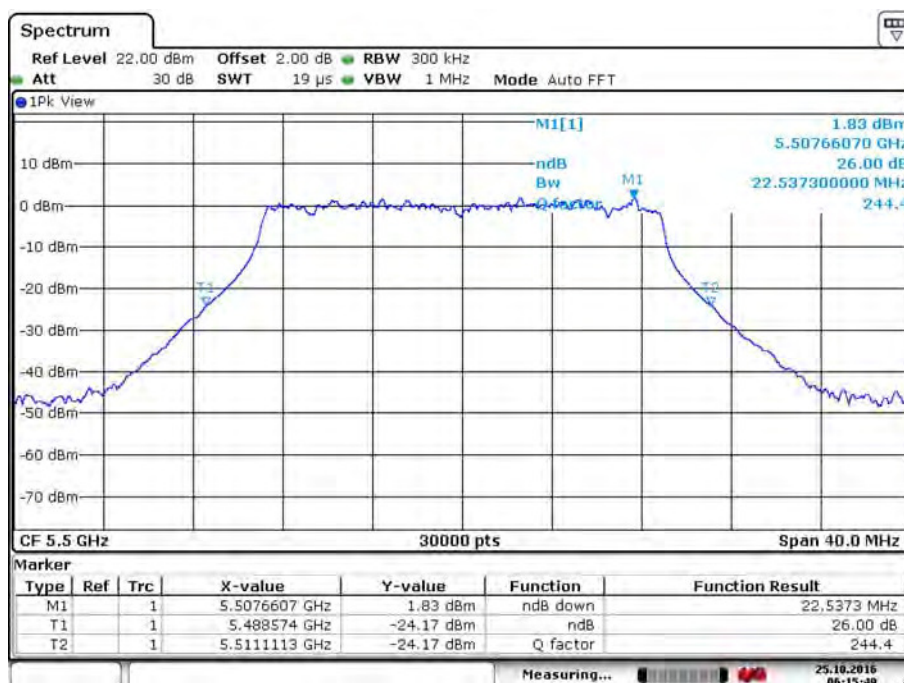


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

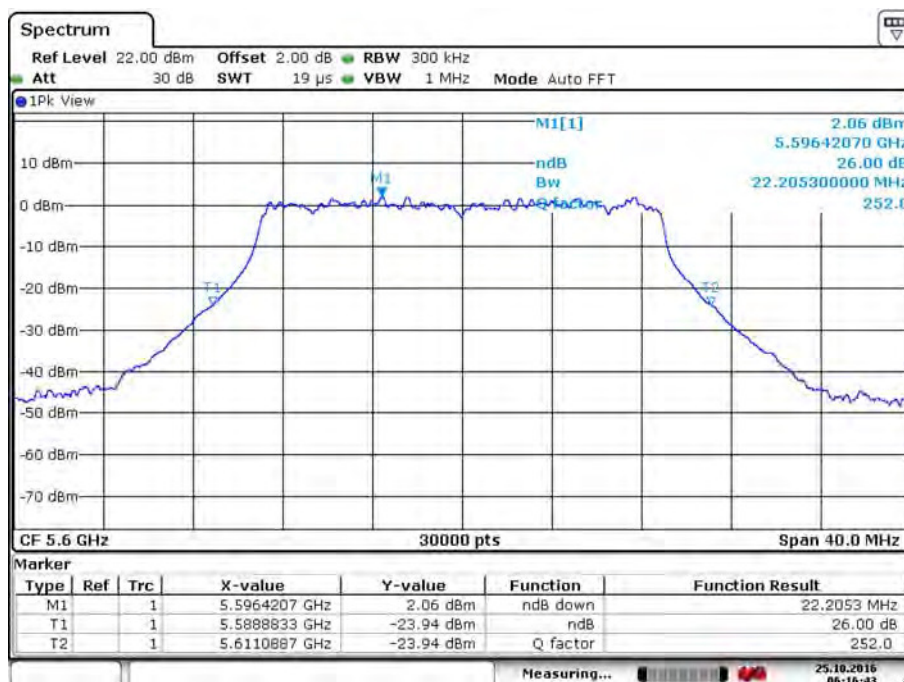
Report No.: SZEM161000852204

Page: 49 of 544

Test mode:	802.11ac(HT20)	Frequency(MHz):	5500
------------	----------------	-----------------	------



Test mode:	802.11ac(HT20)	Frequency(MHz):	5600
------------	----------------	-----------------	------



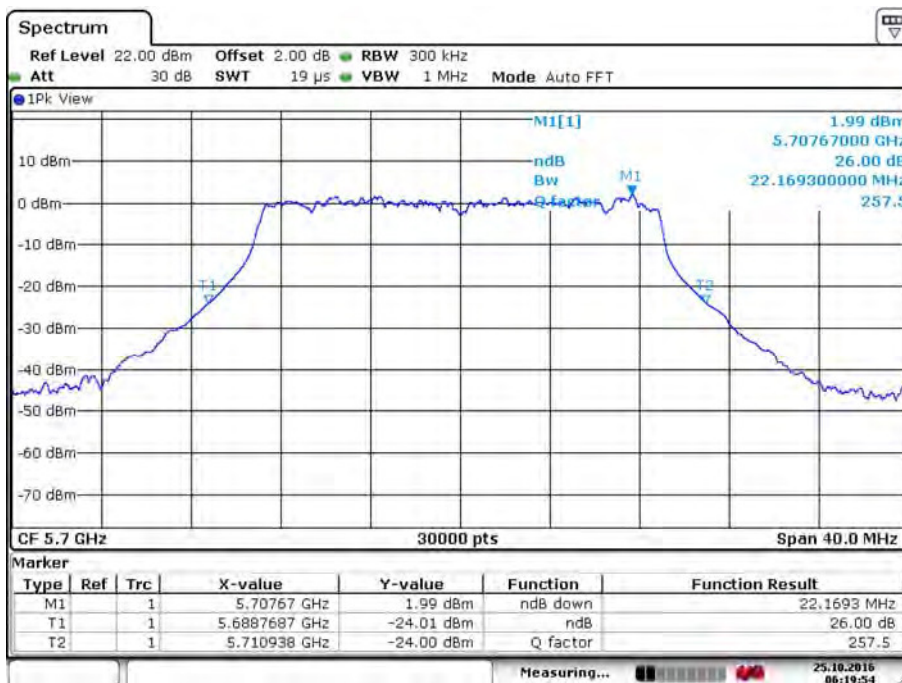


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM161000852204

Page: 50 of 544

Test mode:	802.11ac(HT20)	Frequency(MHz):	5700
------------	----------------	-----------------	------



Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5180
------------	---------------------	-----------------	------



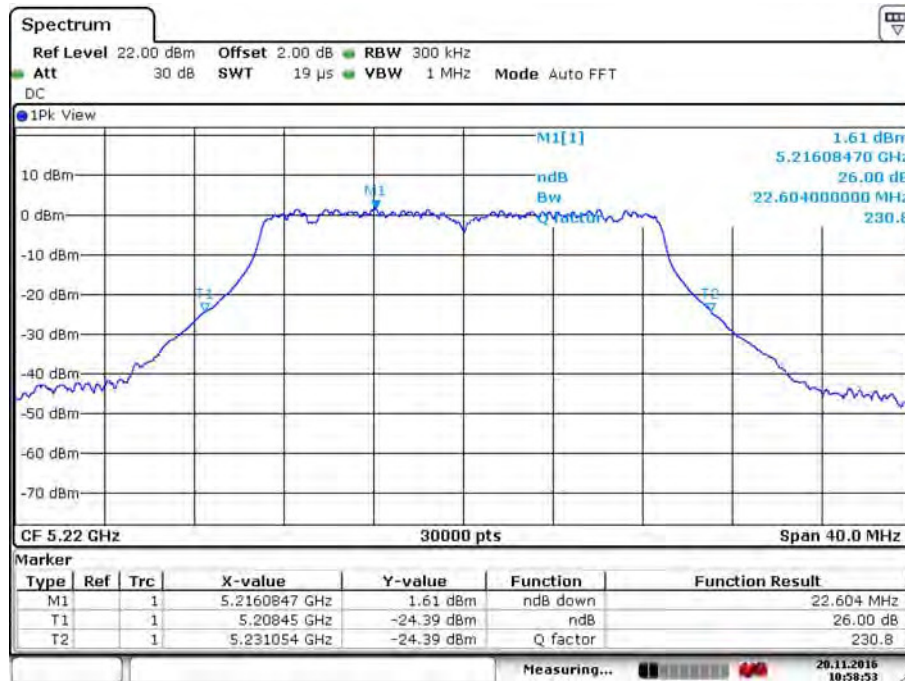


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

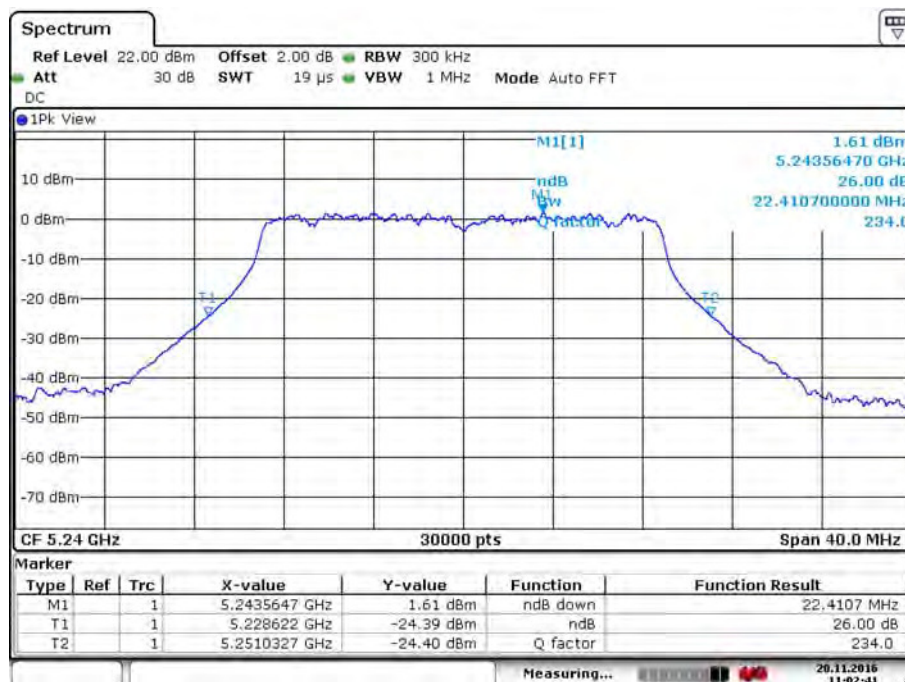
Report No.: SZEM161000852204

Page: 51 of 544

Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5220
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5240
------------	---------------------	-----------------	------



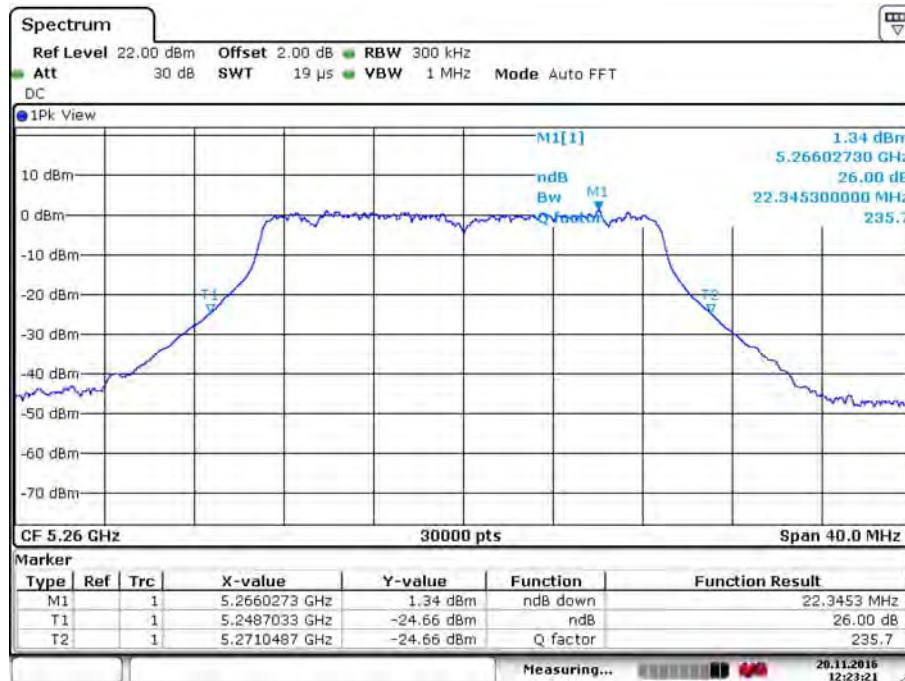


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

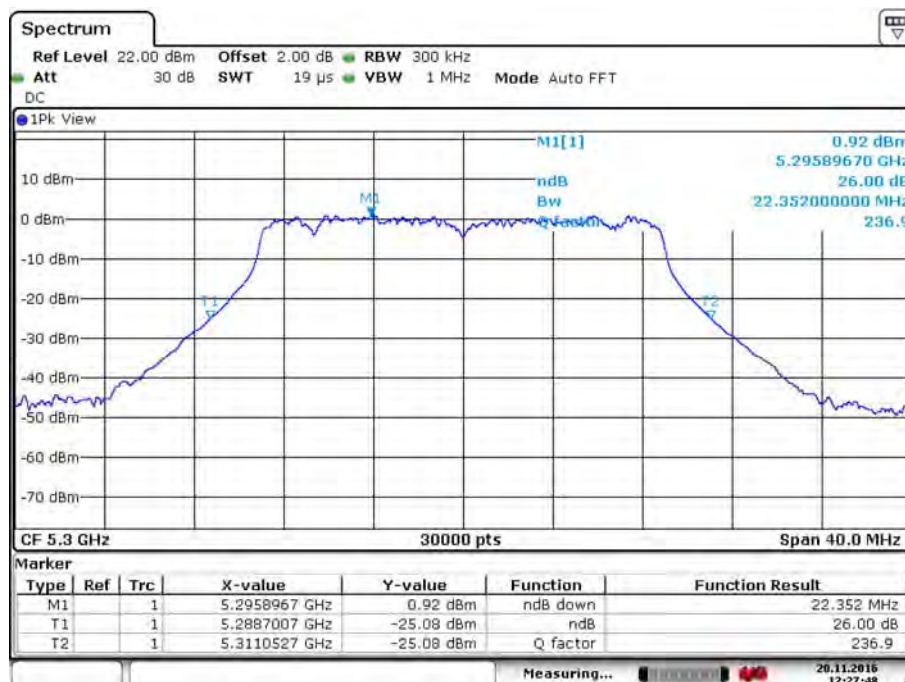
Report No.: SZEM161000852204

Page: 52 of 544

Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5260
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5300
------------	---------------------	-----------------	------



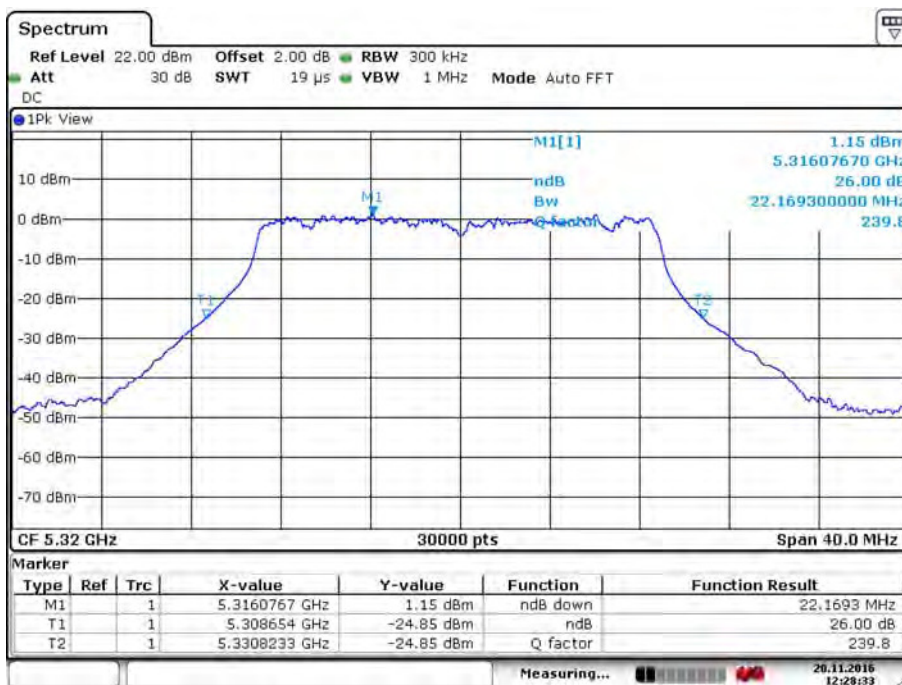


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

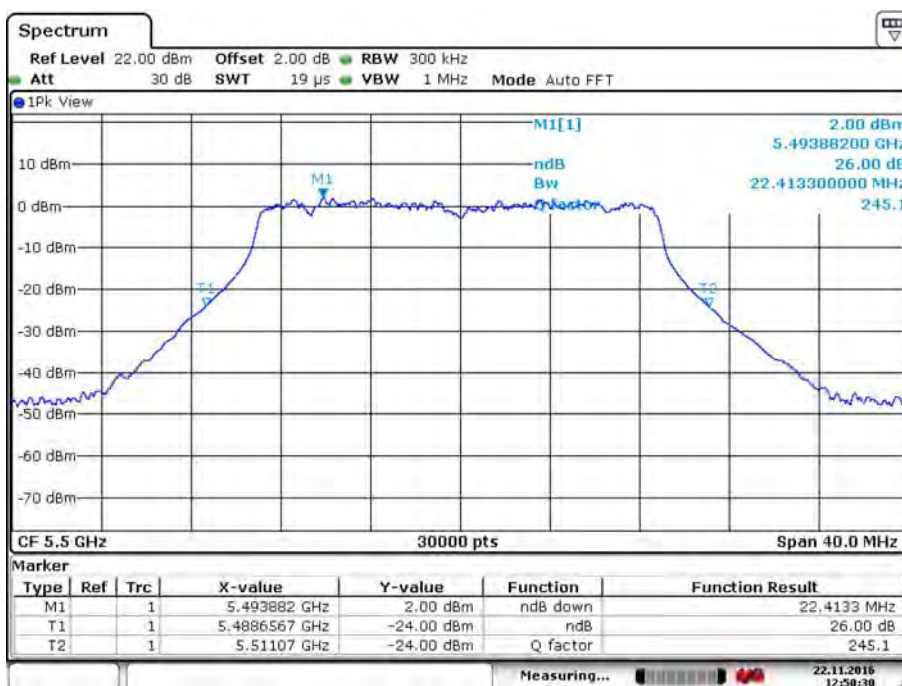
Report No.: SZEM161000852204

Page: 53 of 544

Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5320
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5500
------------	---------------------	-----------------	------



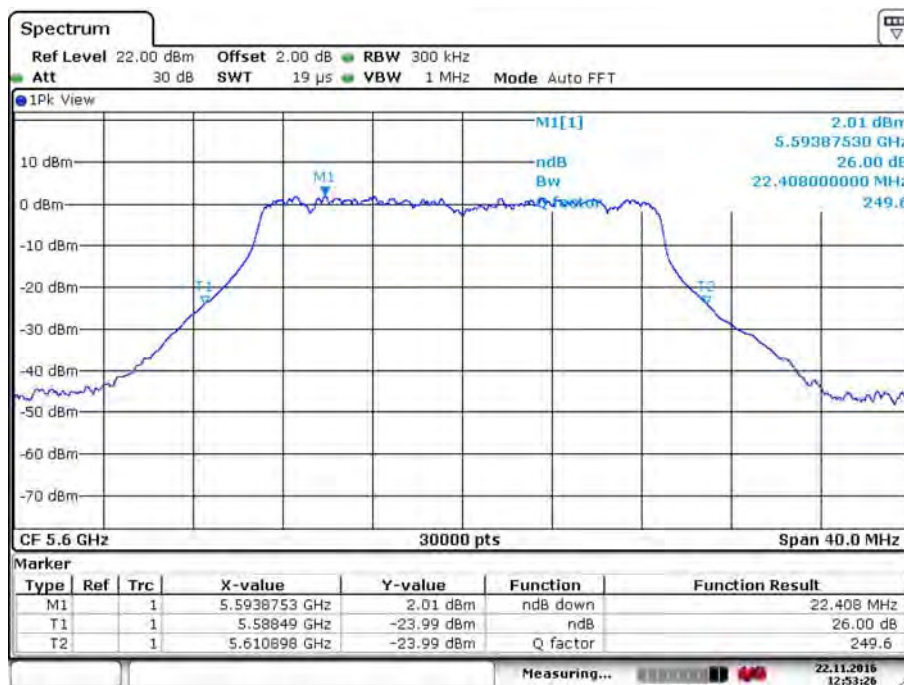


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

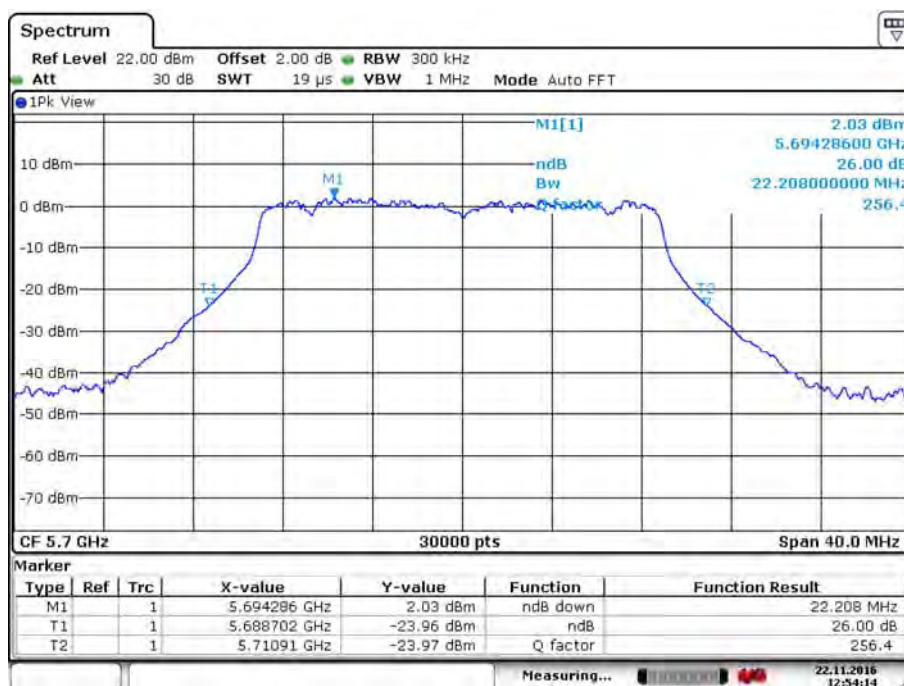
Report No.: SZEM161000852204

Page: 54 of 544

Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5600
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5700
------------	---------------------	-----------------	------



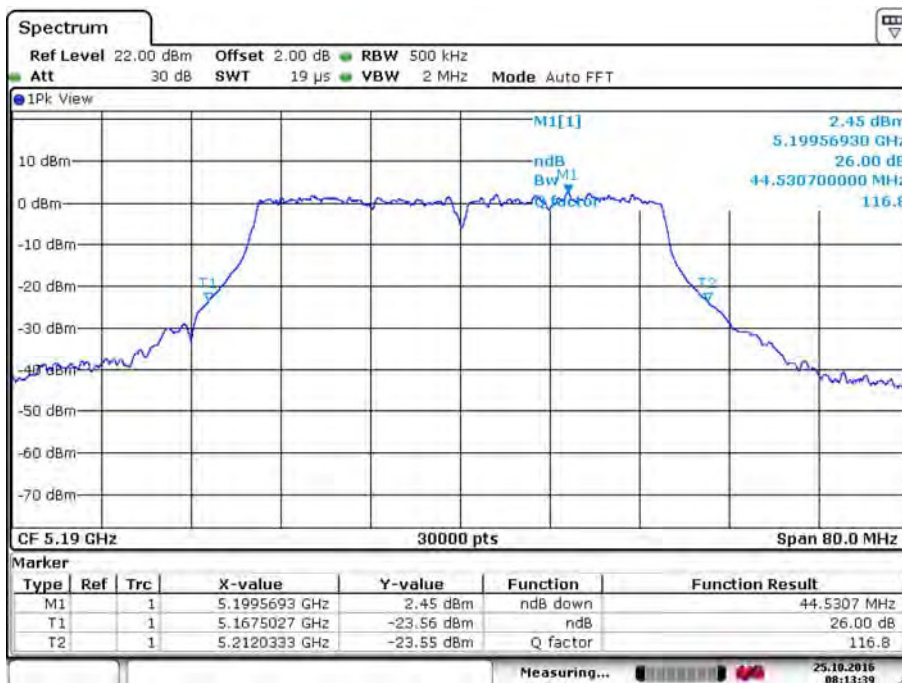


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

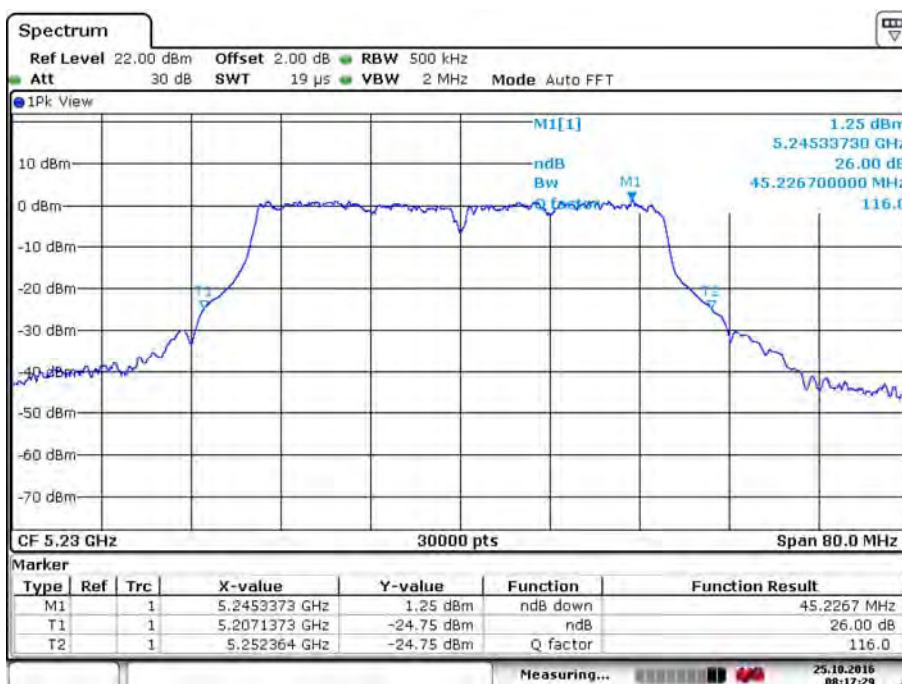
Report No.: SZEM161000852204

Page: 55 of 544

Test mode:	802.11n(HT40)	Frequency(MHz):	5190
------------	---------------	-----------------	------



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



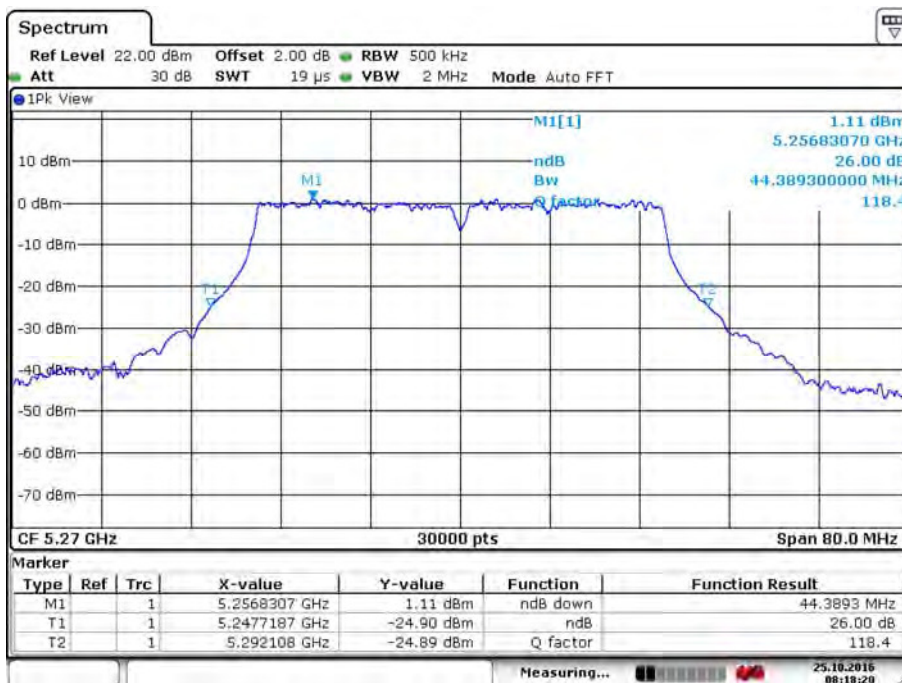


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

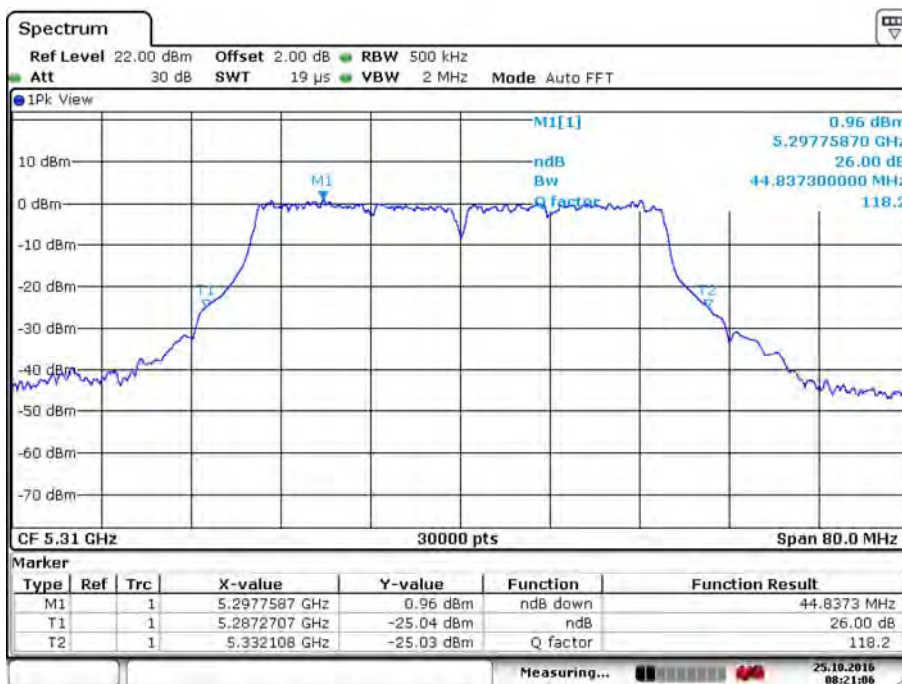
Report No.: SZEM161000852204

Page: 56 of 544

Test mode:	802.11n(HT40)	Frequency(MHz):	5270
------------	---------------	-----------------	------



Test mode:	802.11n(HT40)	Frequency(MHz):	5310
------------	---------------	-----------------	------



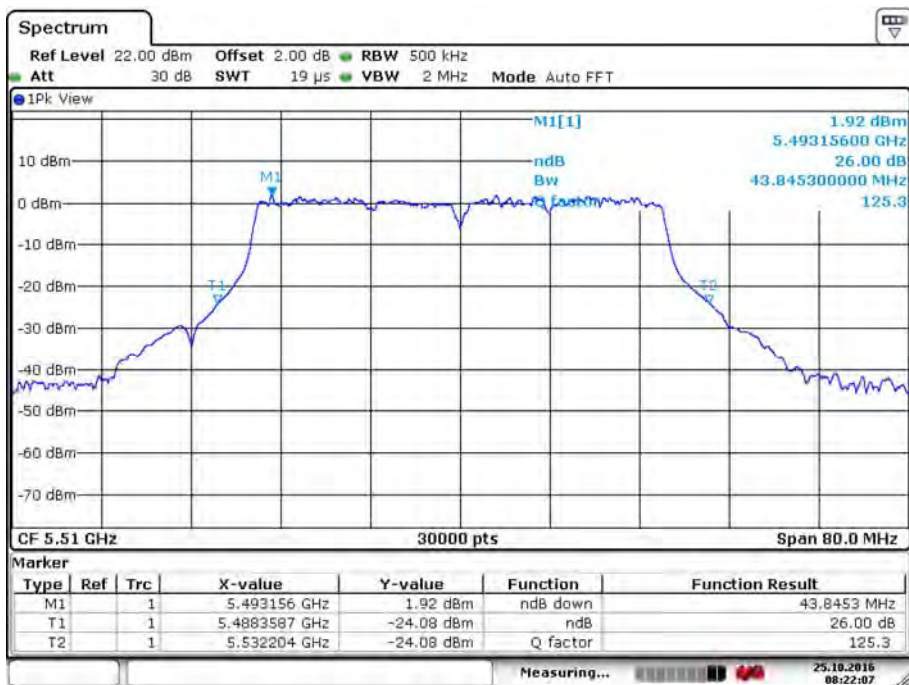


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

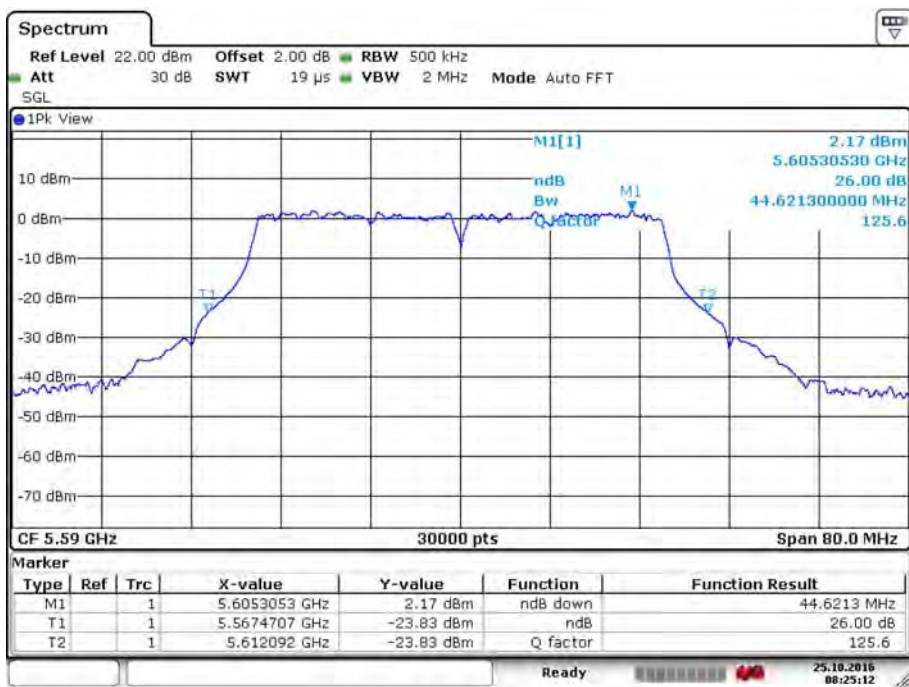
Report No.: SZEM161000852204

Page: 57 of 544

Test mode:	802.11n(HT40)	Frequency(MHz):	5510
------------	---------------	-----------------	------



Test mode:	802.11n(HT40)	Frequency(MHz):	5590
------------	---------------	-----------------	------



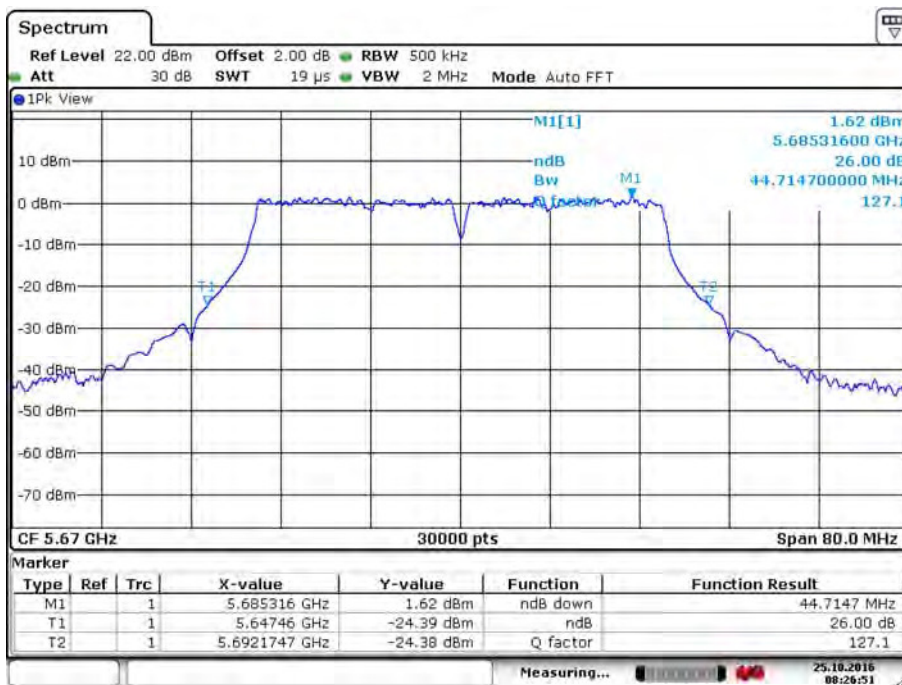


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM161000852204

Page: 58 of 544

Test mode:	802.11n(HT40)	Frequency(MHz):	5670
------------	---------------	-----------------	------



Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5190
------------	--------------------	-----------------	------





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

Report No.: SZEM161000852204

Page: 59 of 544

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



Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5270
------------	--------------------	-----------------	------



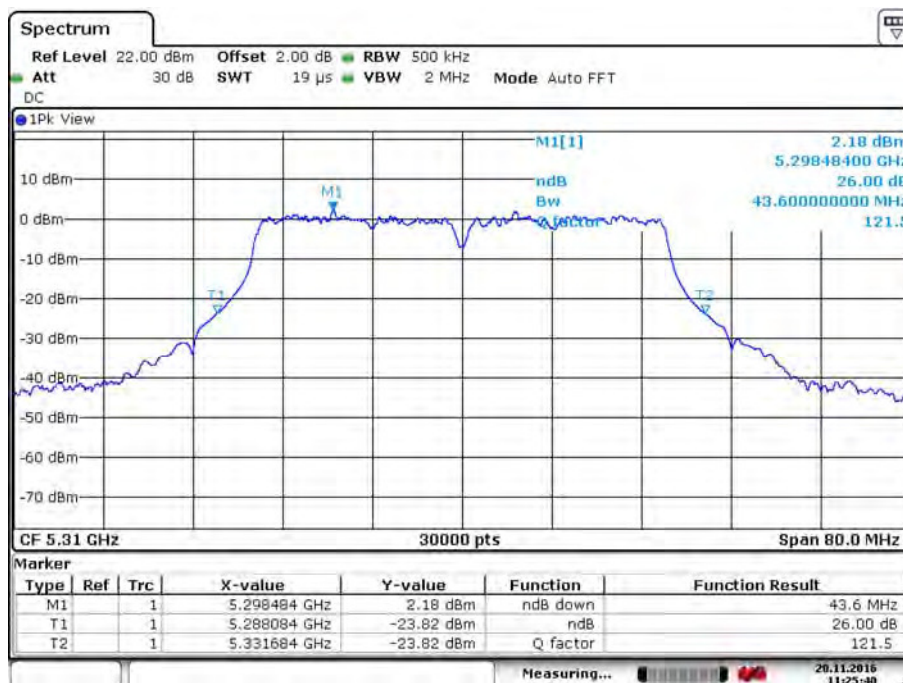


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

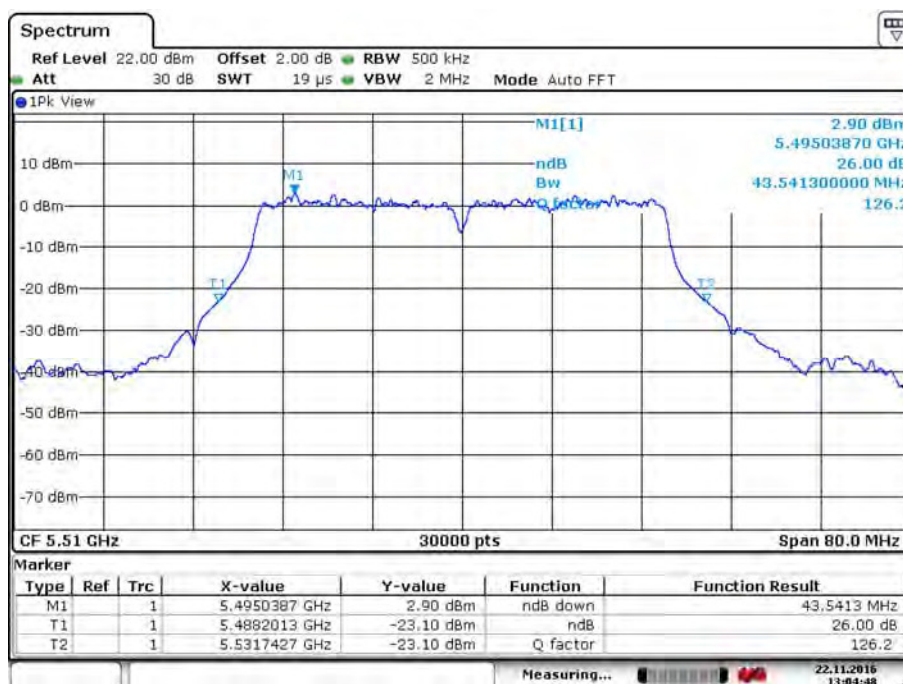
Report No.: SZEM161000852204

Page: 60 of 544

Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5310
------------	--------------------	-----------------	------



Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5510
------------	--------------------	-----------------	------



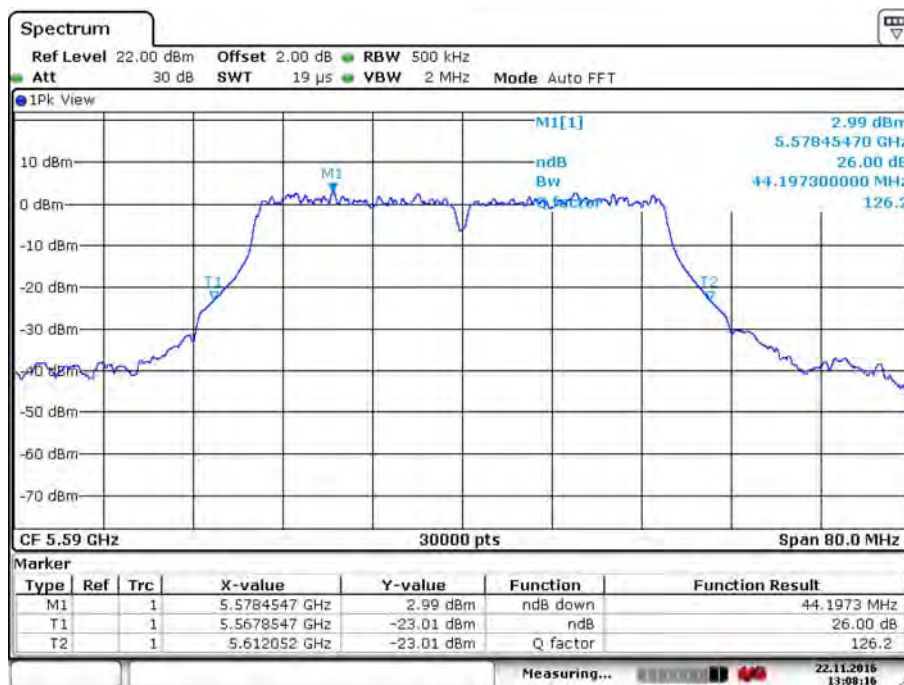


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

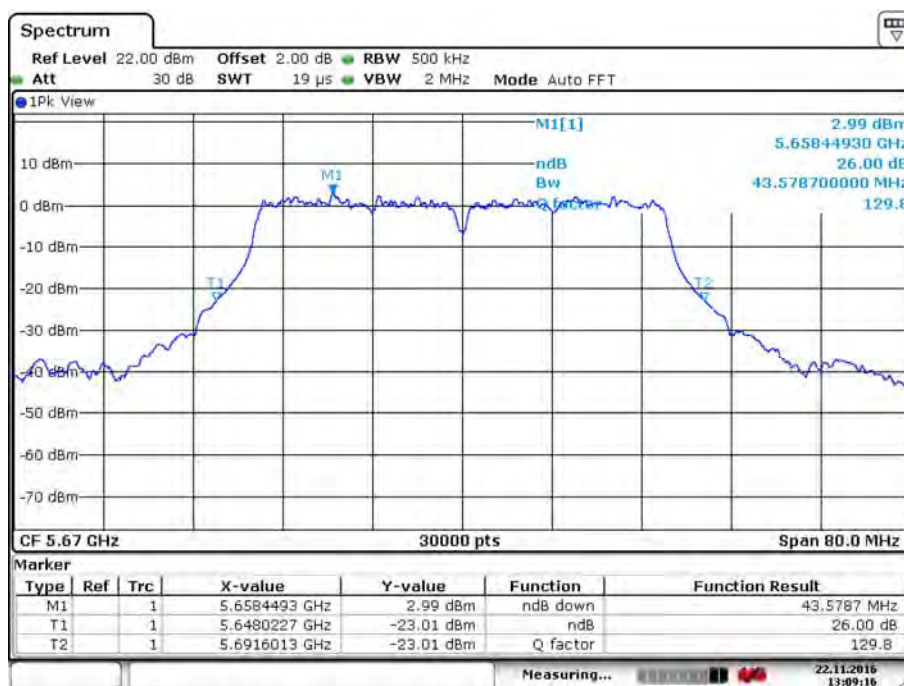
Report No.: SZEM161000852204

Page: 61 of 544

Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5590
------------	--------------------	-----------------	------



Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5670
------------	--------------------	-----------------	------



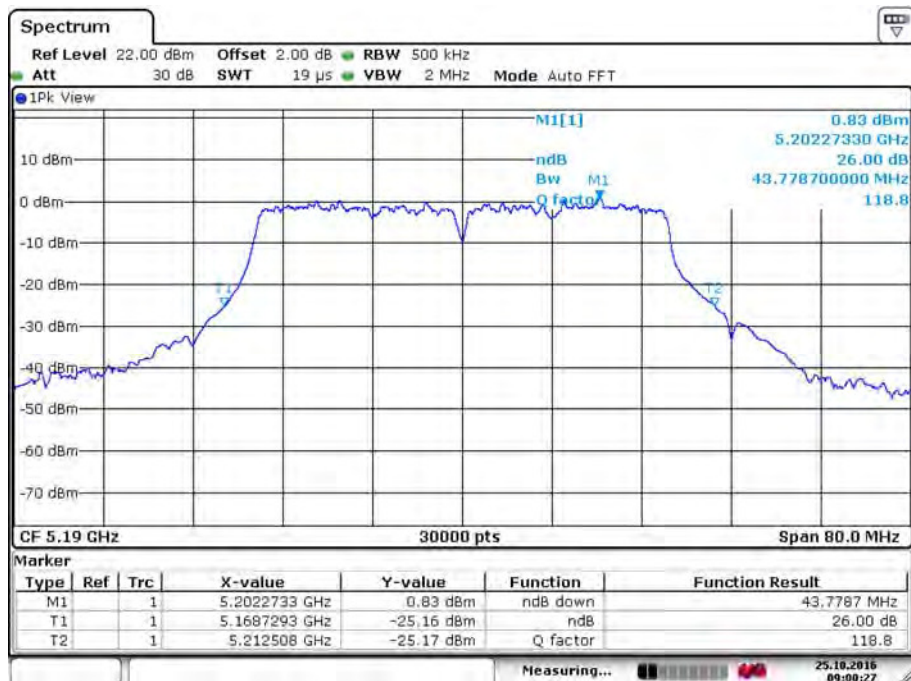


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

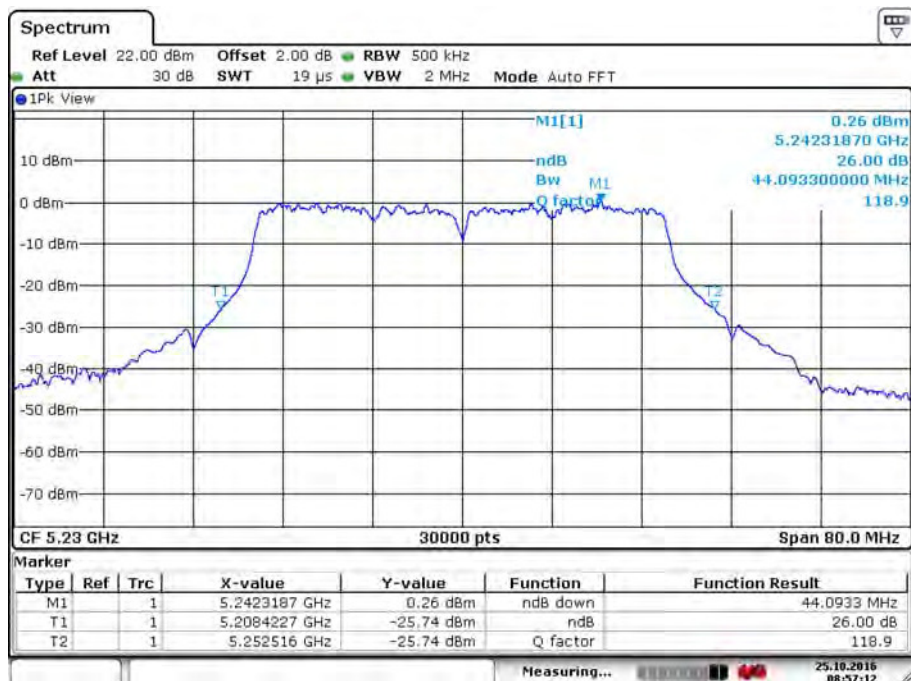
Report No.: SZEM161000852204

Page: 62 of 544

Test mode:	802.11ac(HT40)	Frequency(MHz):	5190
------------	----------------	-----------------	------



Test mode:	802.11ac(HT40)	Frequency(MHz):	5230
------------	----------------	-----------------	------



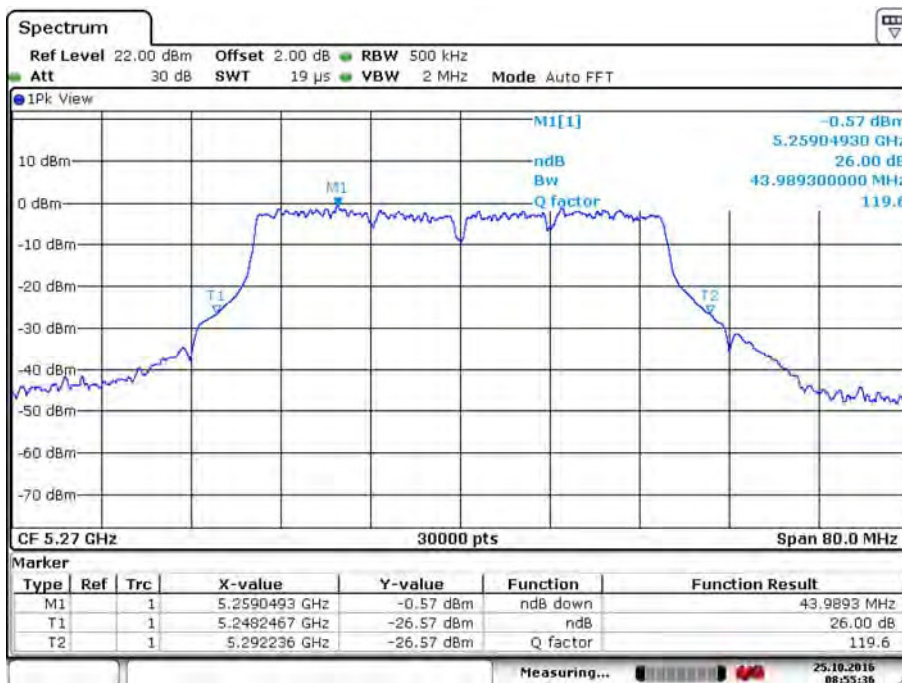


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

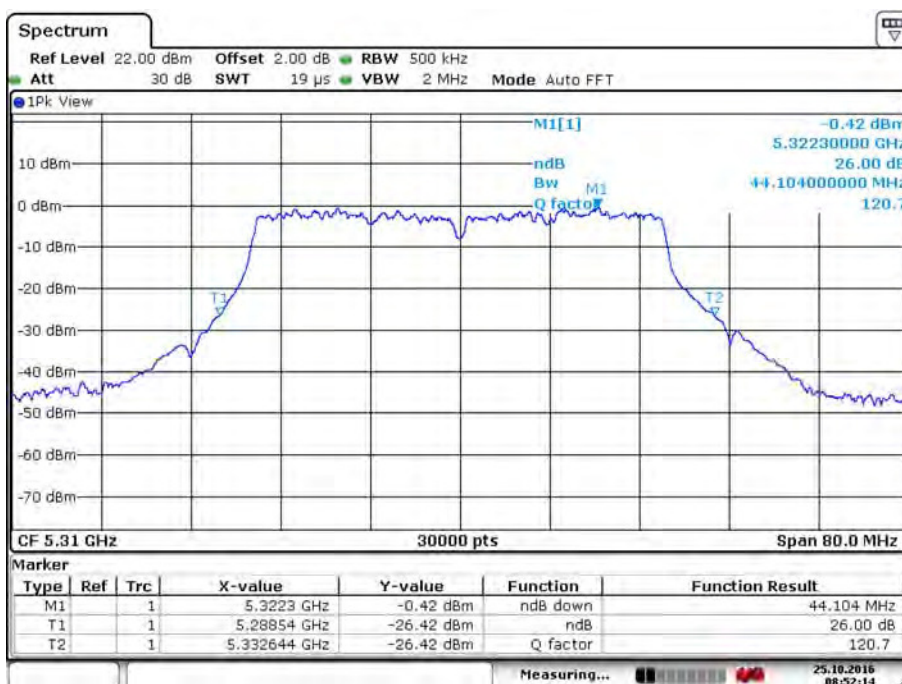
Report No.: SZEM161000852204

Page: 63 of 544

Test mode:	802.11ac(HT40)	Frequency(MHz):	5270
------------	----------------	-----------------	------



Test mode:	802.11ac(HT40)	Frequency(MHz):	5310
------------	----------------	-----------------	------



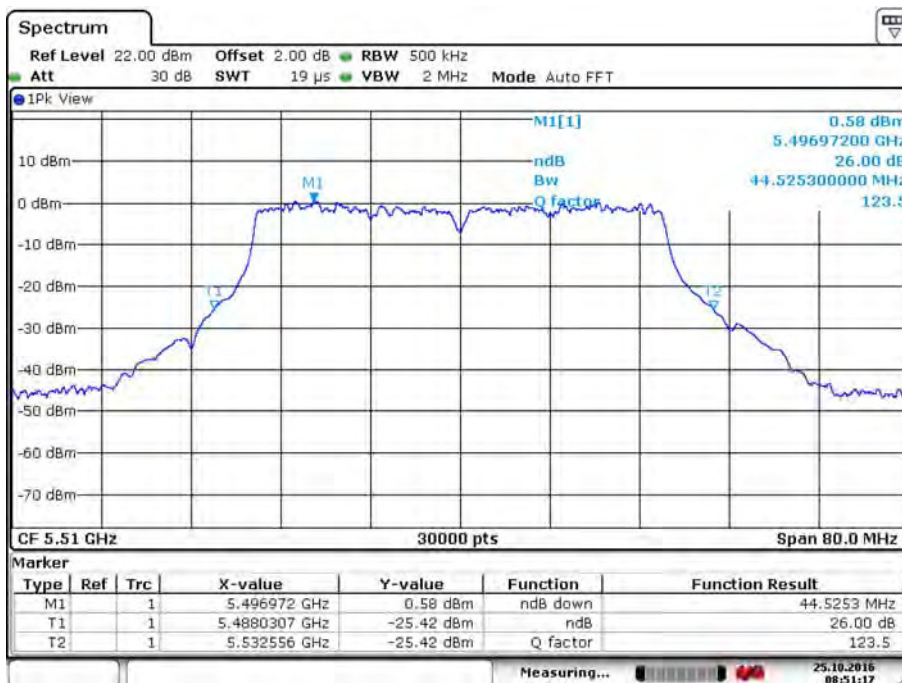


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

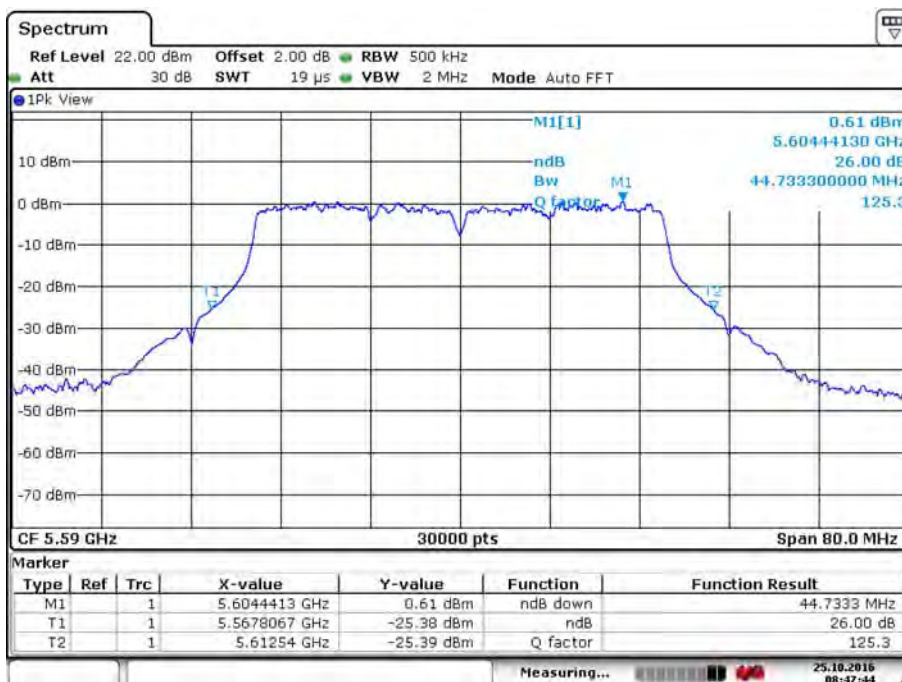
Report No.: SZEM161000852204

Page: 64 of 544

Test mode:	802.11ac(HT40)	Frequency(MHz):	5510
------------	----------------	-----------------	------



Test mode:	802.11ac(HT40)	Frequency(MHz):	5590
------------	----------------	-----------------	------



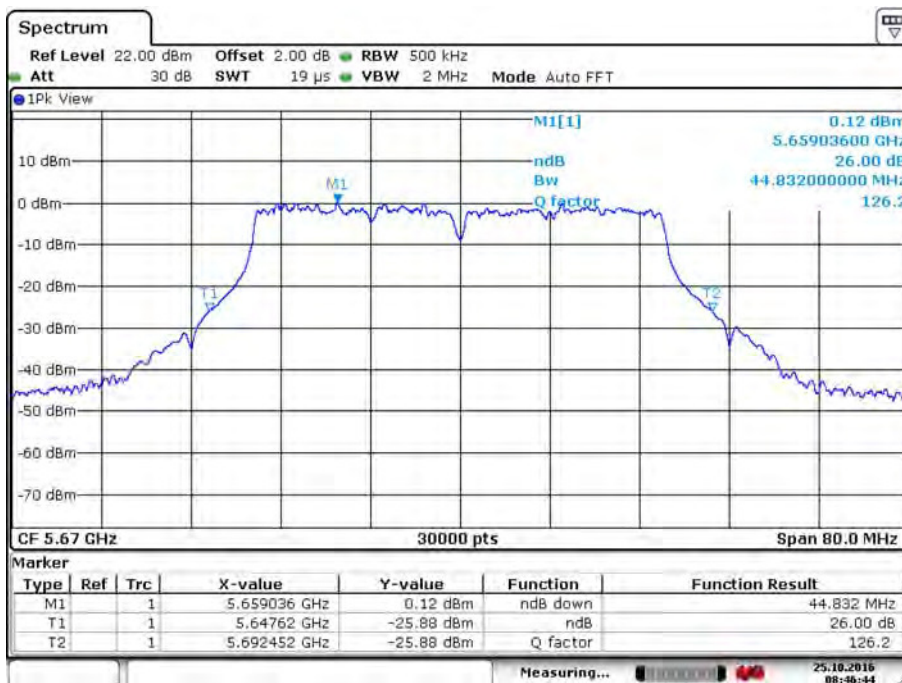


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

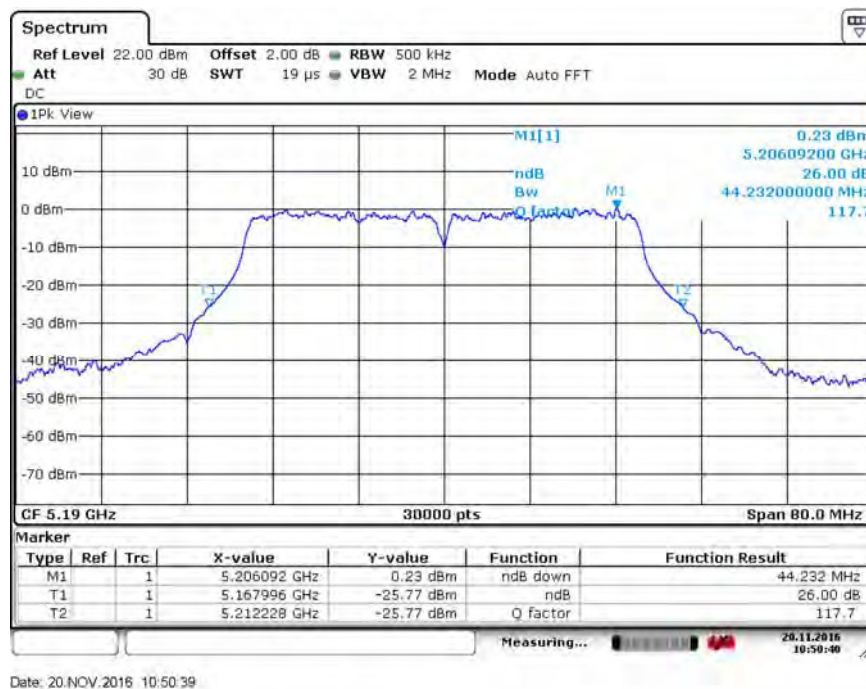
Report No.: SZEM161000852204

Page: 65 of 544

Test mode:	802.11ac(HT40)	Frequency(MHz):	5670
------------	----------------	-----------------	------



Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5190
------------	---------------------	-----------------	------



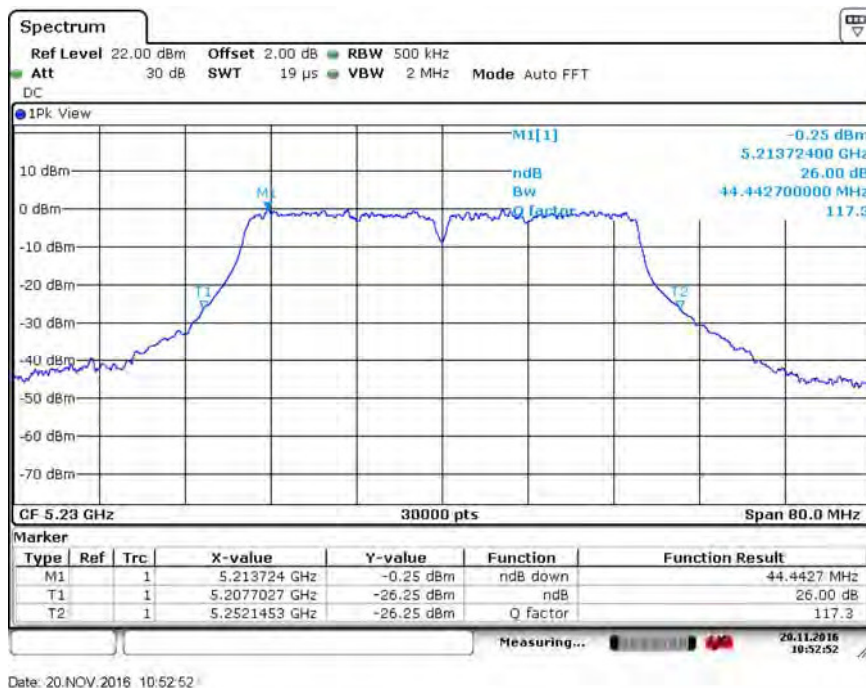


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

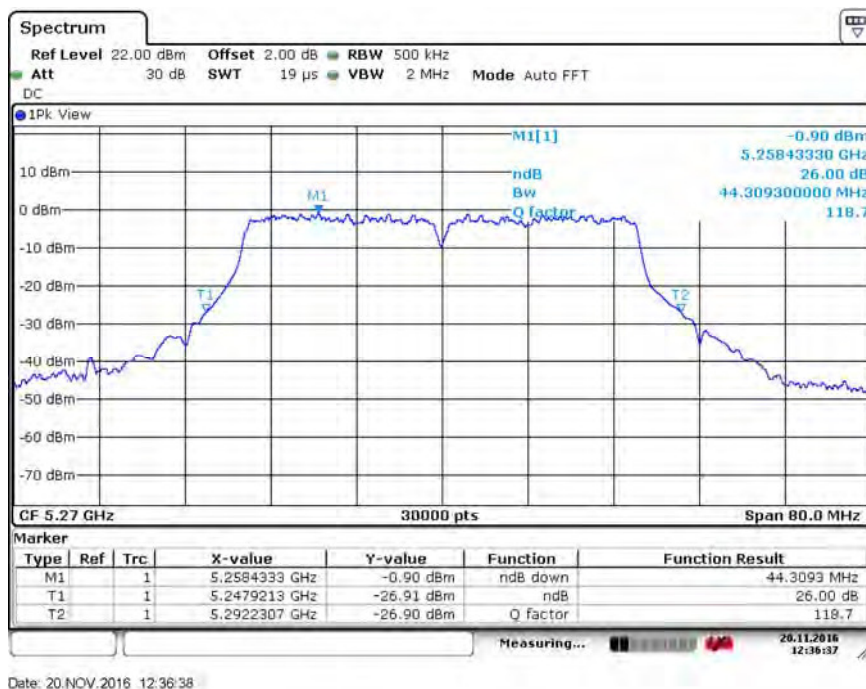
Report No.: SZEM161000852204

Page: 66 of 544

Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5230
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5270
------------	---------------------	-----------------	------



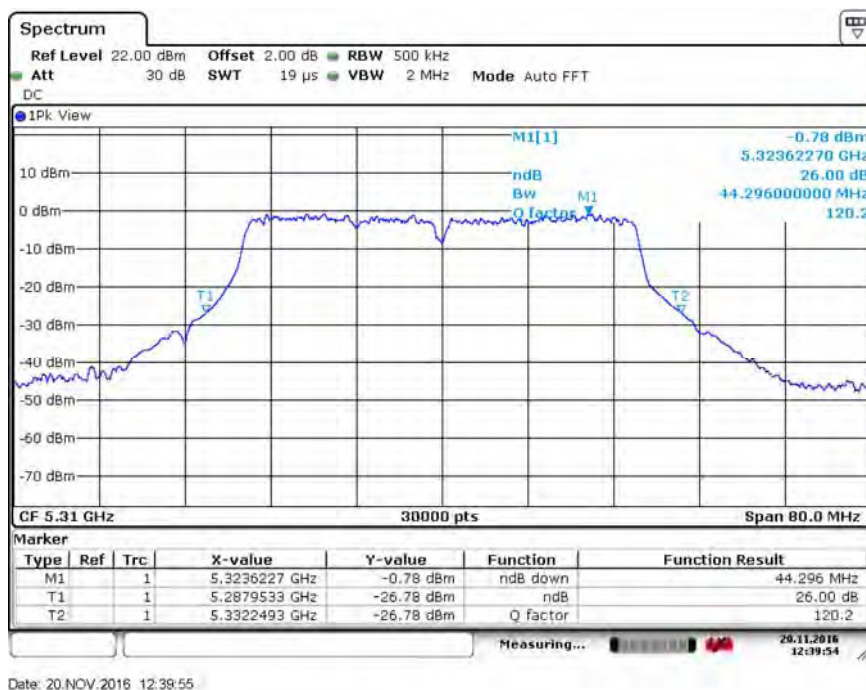


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

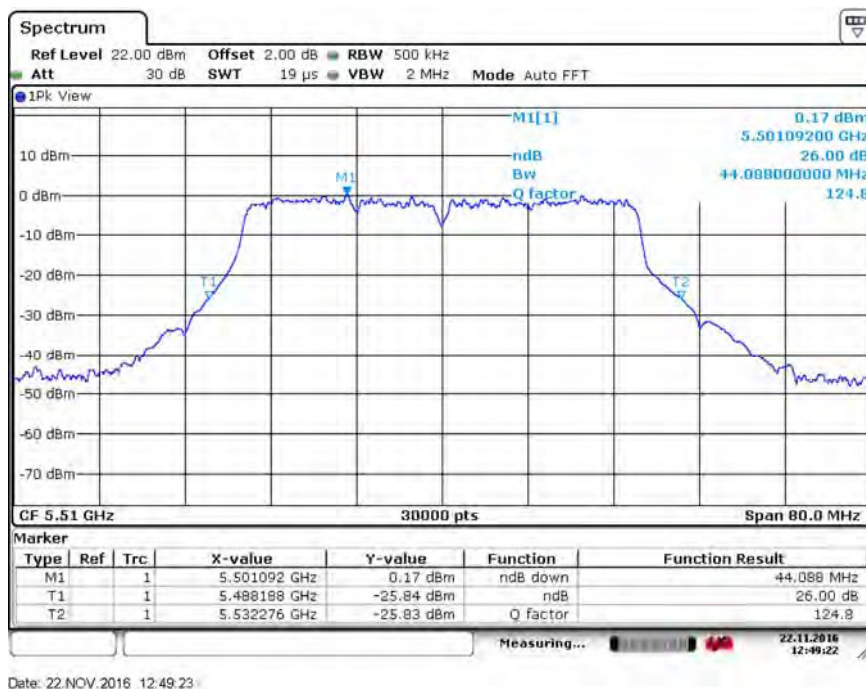
Report No.: SZEM161000852204

Page: 67 of 544

Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5310
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5510
------------	---------------------	-----------------	------



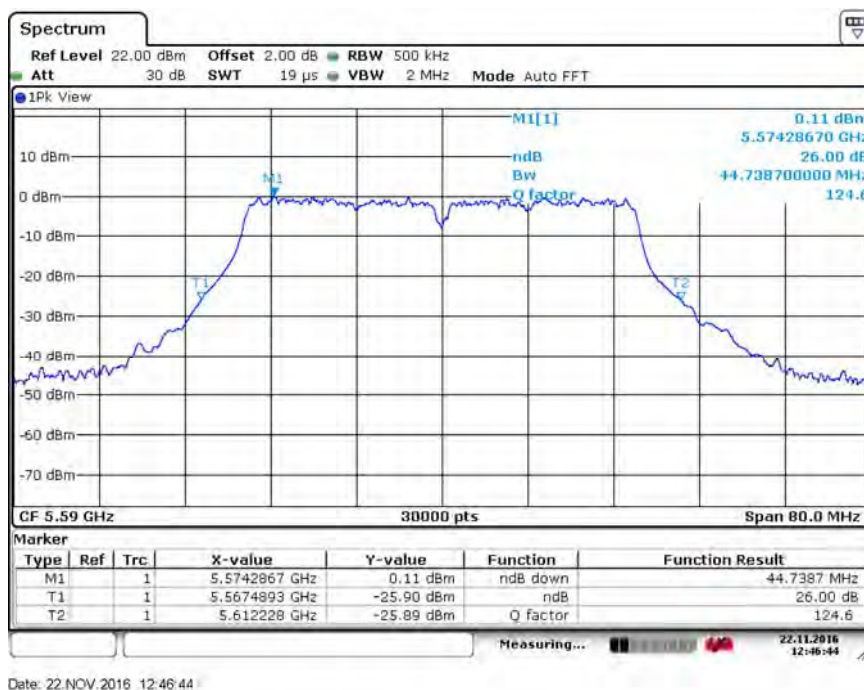


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

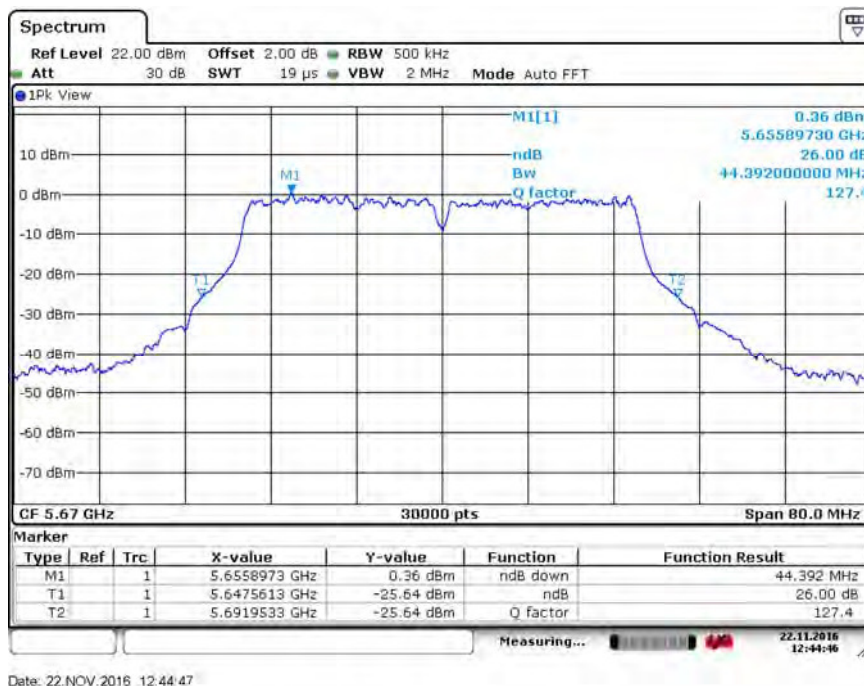
Report No.: SZEM161000852204

Page: 68 of 544

Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5590
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5670
------------	---------------------	-----------------	------



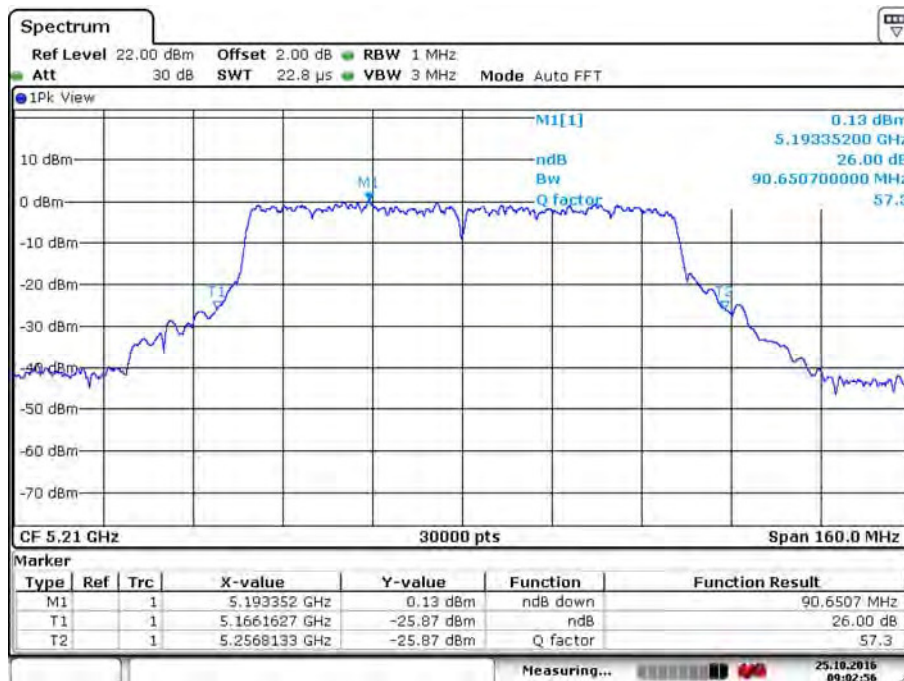


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

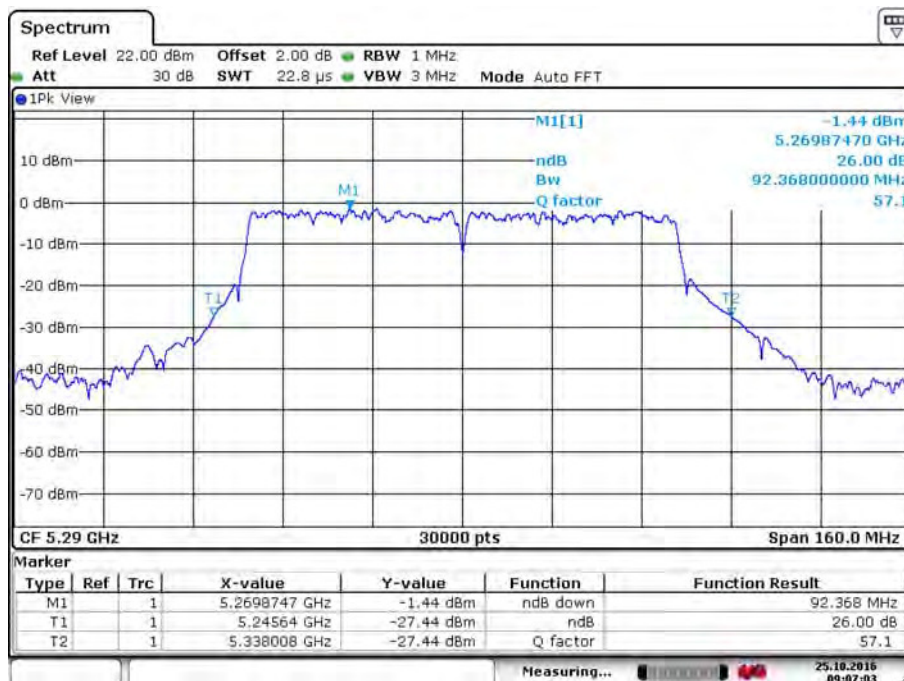
Report No.: SZEM161000852204

Page: 69 of 544

Test mode:	802.11ac(HT80)	Frequency(MHz):	5210
------------	----------------	-----------------	------



Test mode:	802.11ac(HT80)	Frequency(MHz):	5290
------------	----------------	-----------------	------



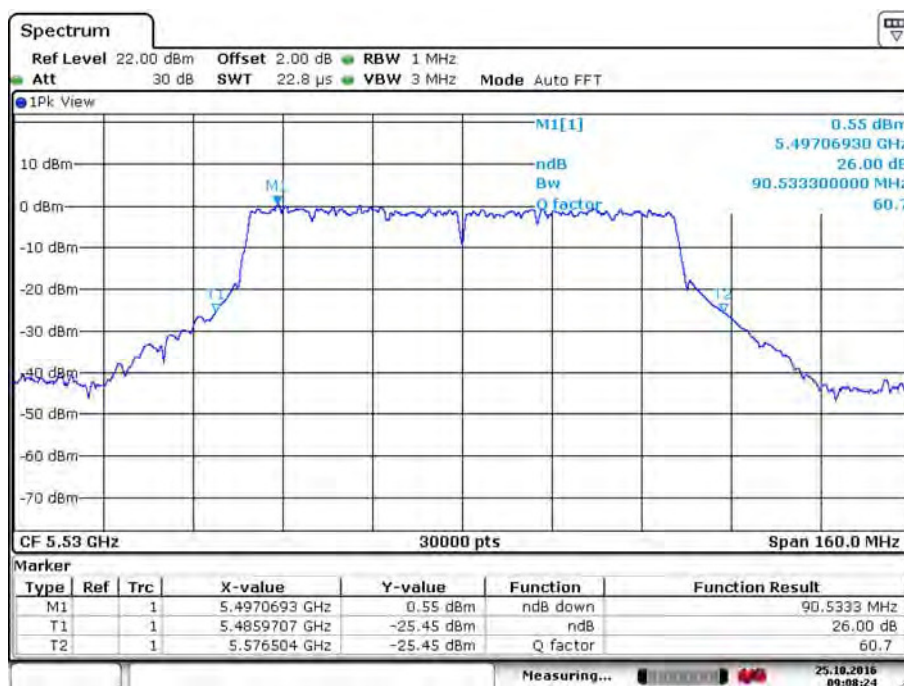


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

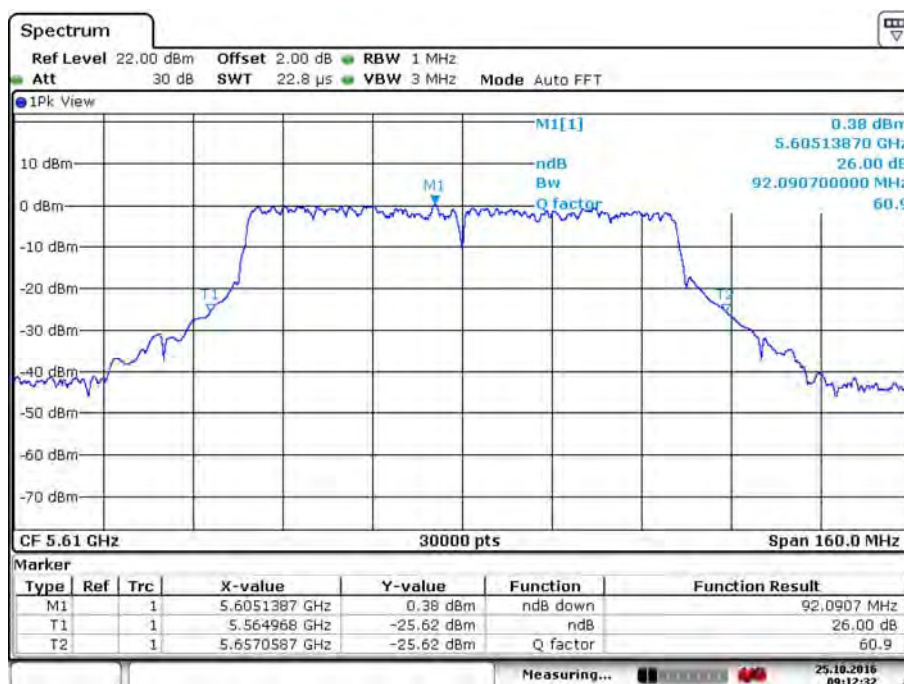
Report No.: SZEM161000852204

Page: 70 of 544

Test mode:	802.11ac(HT80)	Frequency(MHz):	5530
------------	----------------	-----------------	------



Test mode:	802.11ac(HT80)	Frequency(MHz):	5610
------------	----------------	-----------------	------





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

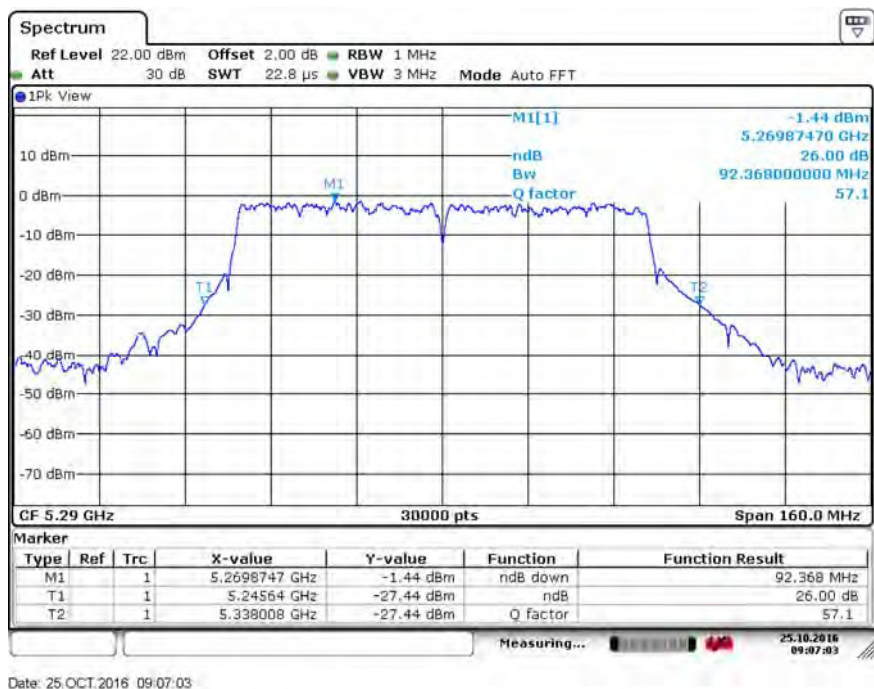
Report No.: SZEM161000852204

Page: 71 of 544

Test mode:	802.11ac(HT80) MIMO	Frequency(MHz):	5210
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT80) MIMO	Frequency(MHz):	5290
------------	---------------------	-----------------	------



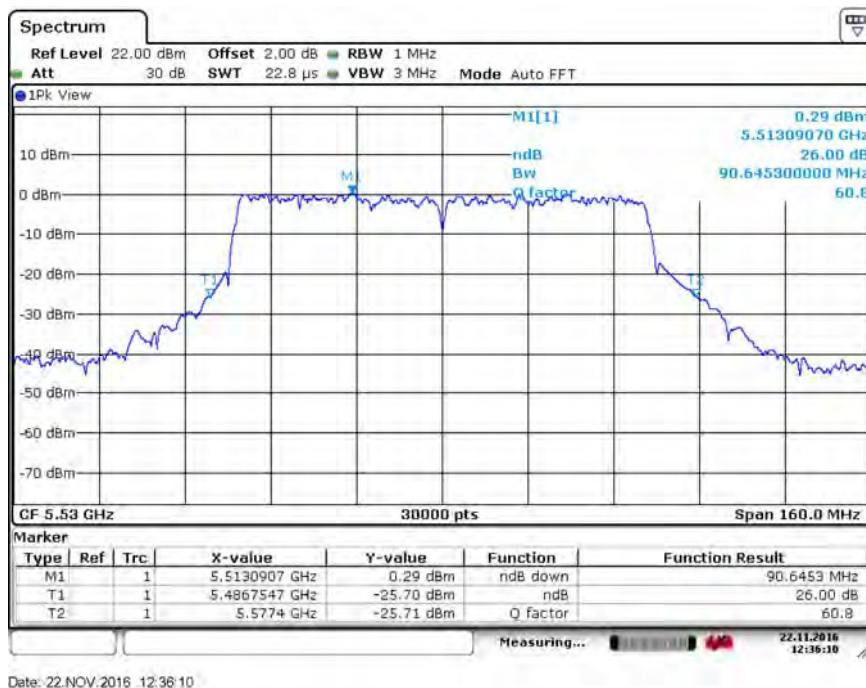


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

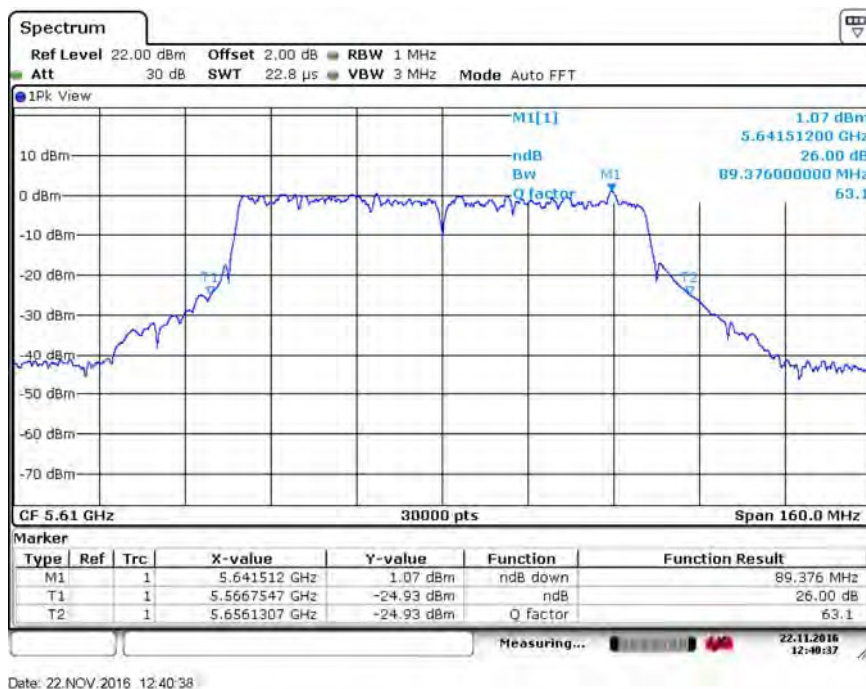
Report No.: SZEM161000852204

Page: 72 of 544

Test mode:	802.11ac(HT80) MIMO	Frequency(MHz):	5530
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT80) MIMO	Frequency(MHz):	5610
------------	---------------------	-----------------	------





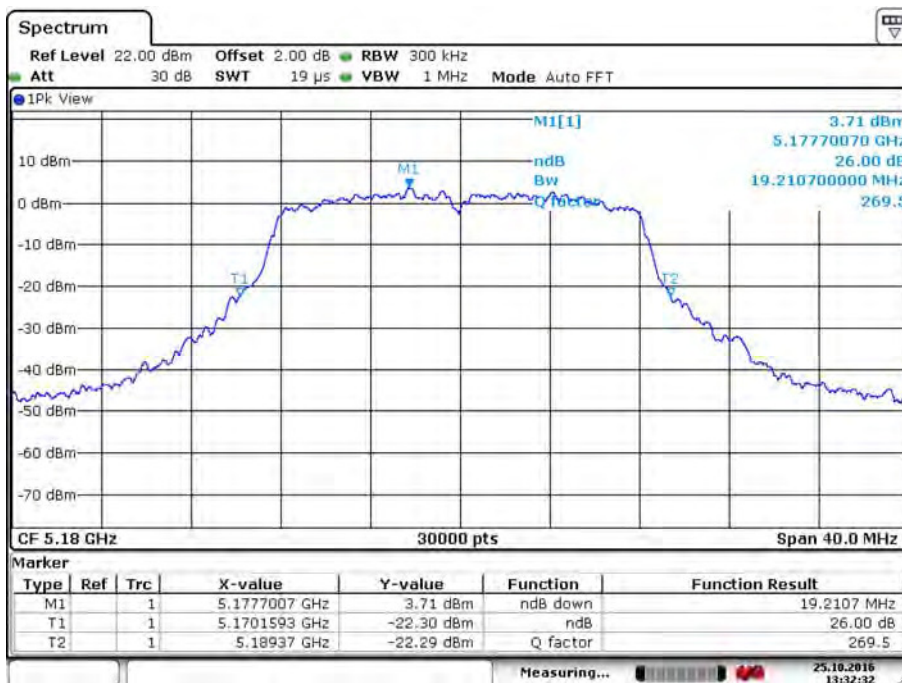
SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM161000852204

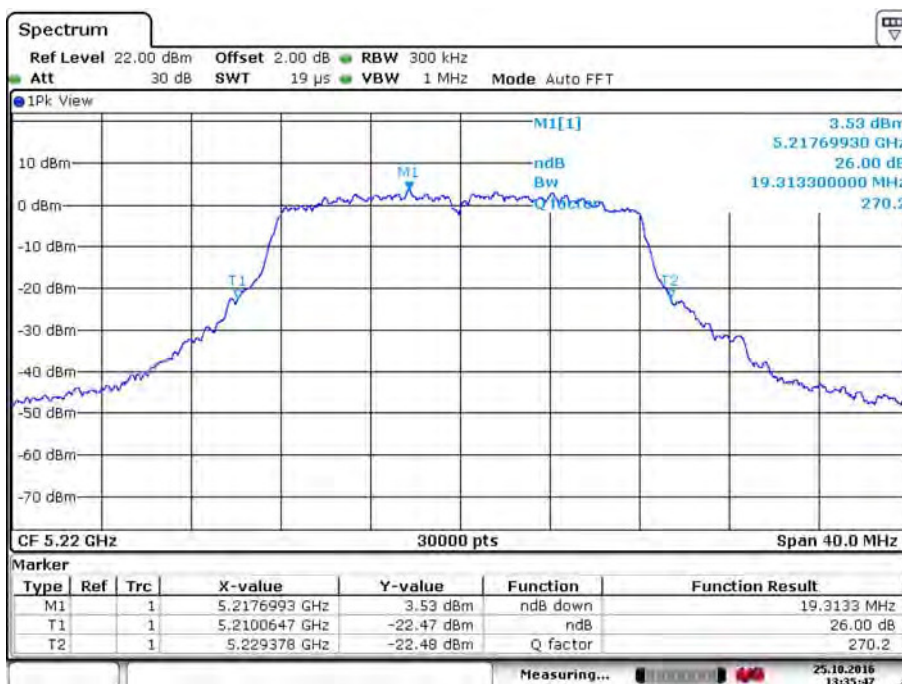
Page: 73 of 544

Antenna 1

Test mode:	802.11a	Frequency(MHz):	5180
------------	---------	-----------------	------



Test mode:	802.11a	Frequency(MHz):	5220
------------	---------	-----------------	------



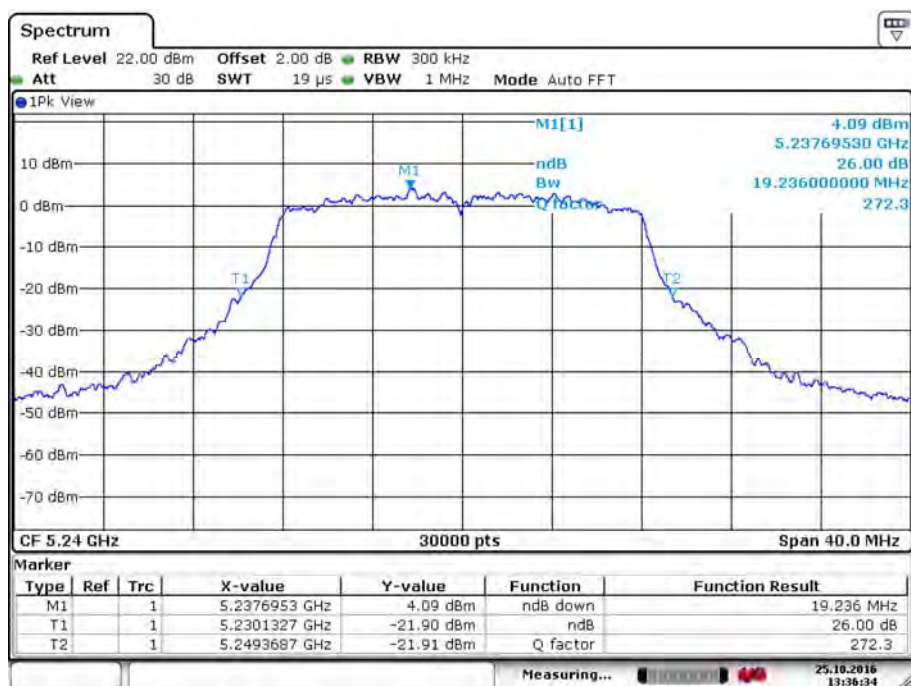


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

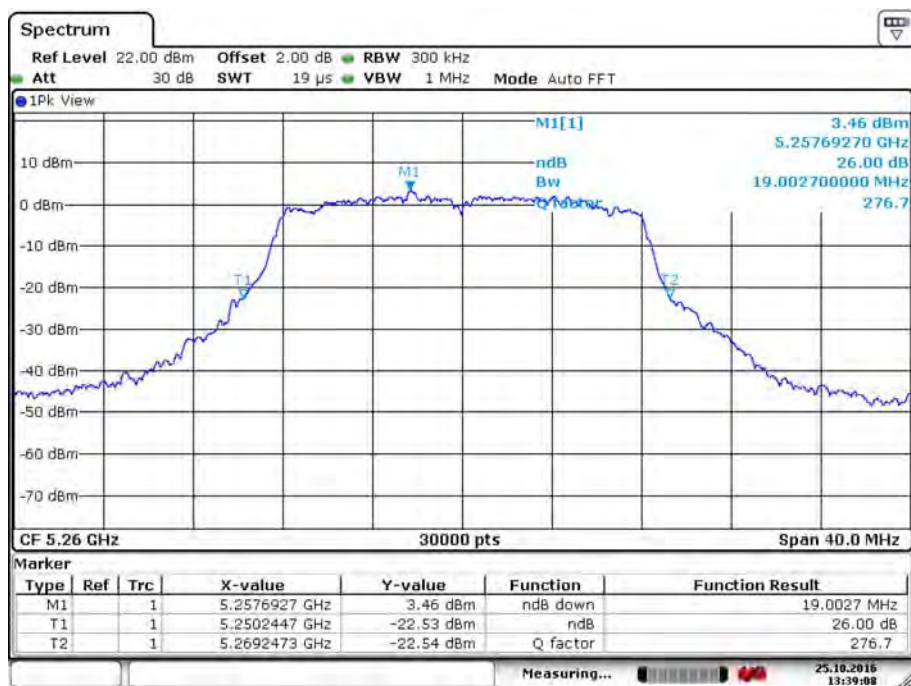
Report No.: SZEM161000852204

Page: 74 of 544

Test mode:	802.11a	Frequency(MHz):	5240
------------	---------	-----------------	------



Test mode:	802.11a	Frequency(MHz):	5260
------------	---------	-----------------	------



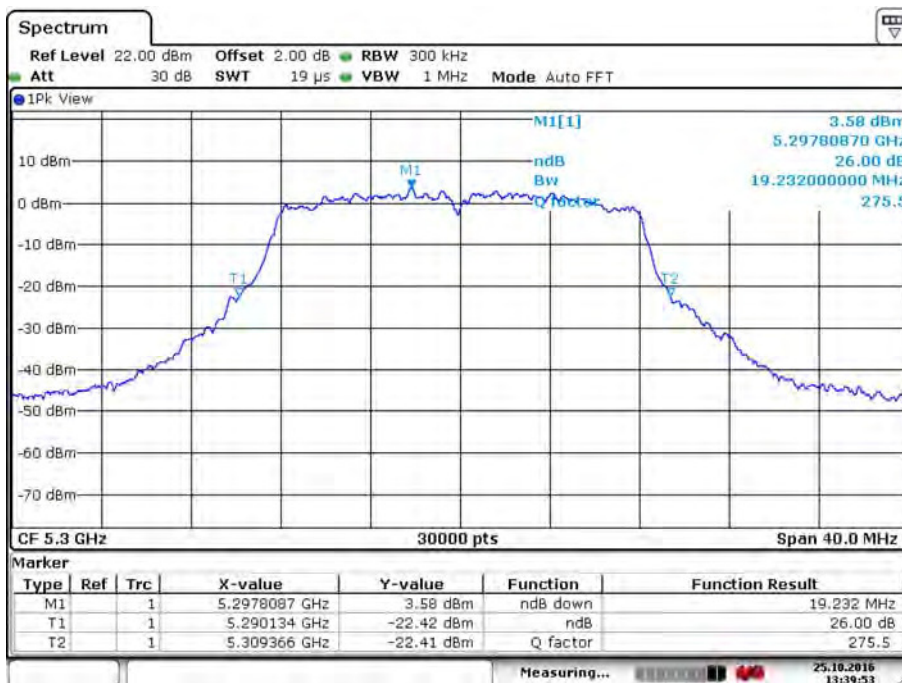


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

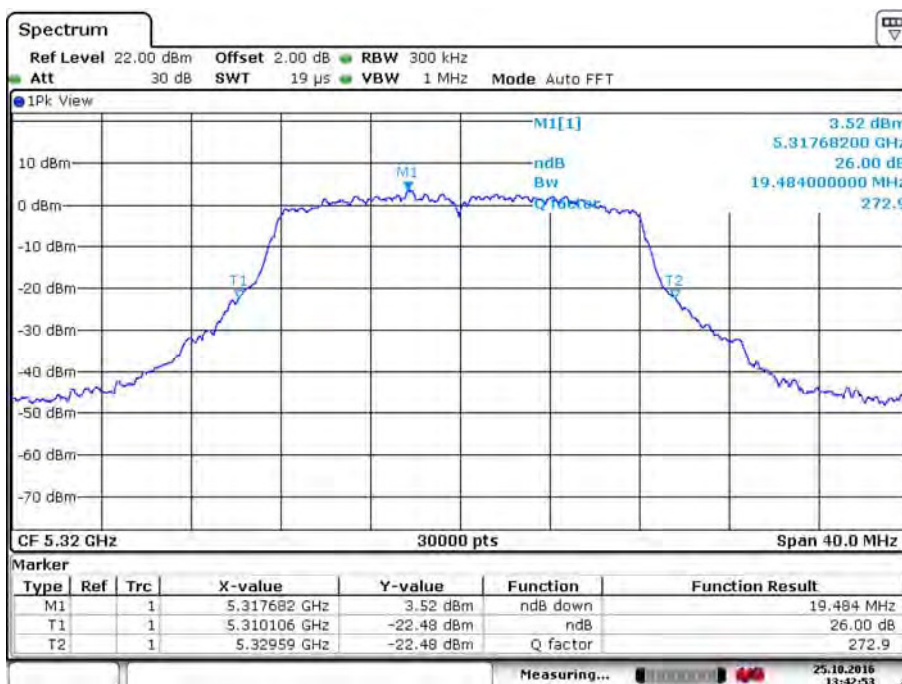
Report No.: SZEM161000852204

Page: 75 of 544

Test mode:	802.11a	Frequency(MHz):	5300
------------	---------	-----------------	------



Test mode:	802.11a	Frequency(MHz):	5320
------------	---------	-----------------	------



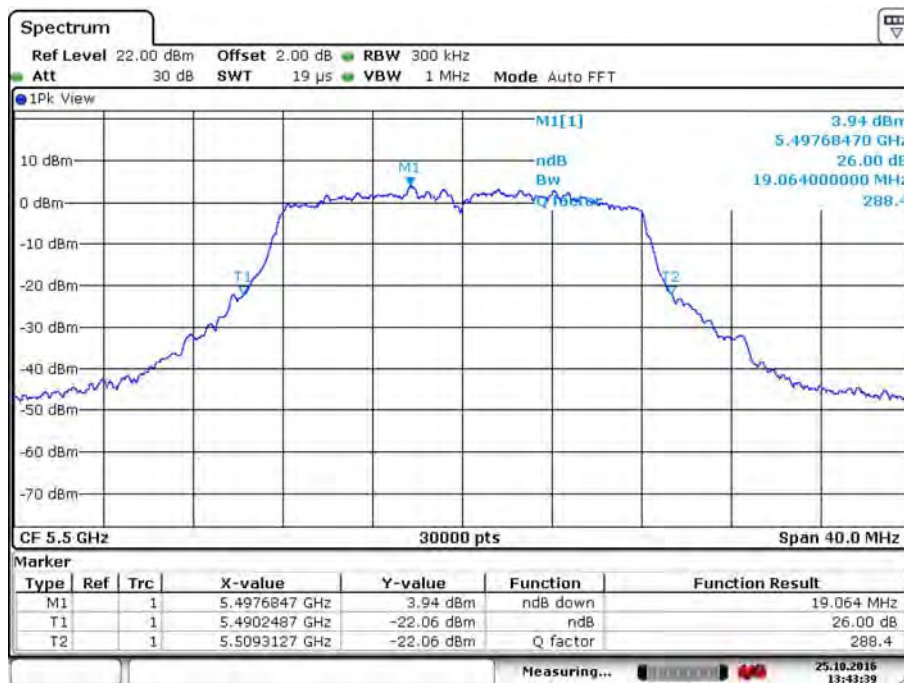


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM161000852204

Page: 76 of 544

Test mode:	802.11a	Frequency(MHz):	5500
------------	---------	-----------------	------



Test mode:	802.11a	Frequency(MHz):	5600
------------	---------	-----------------	------



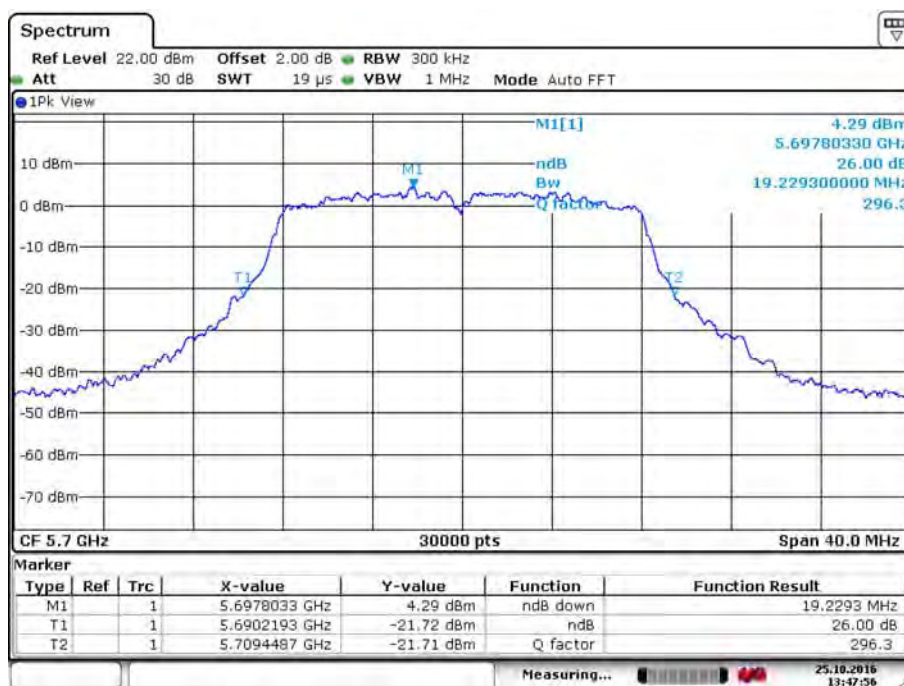


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

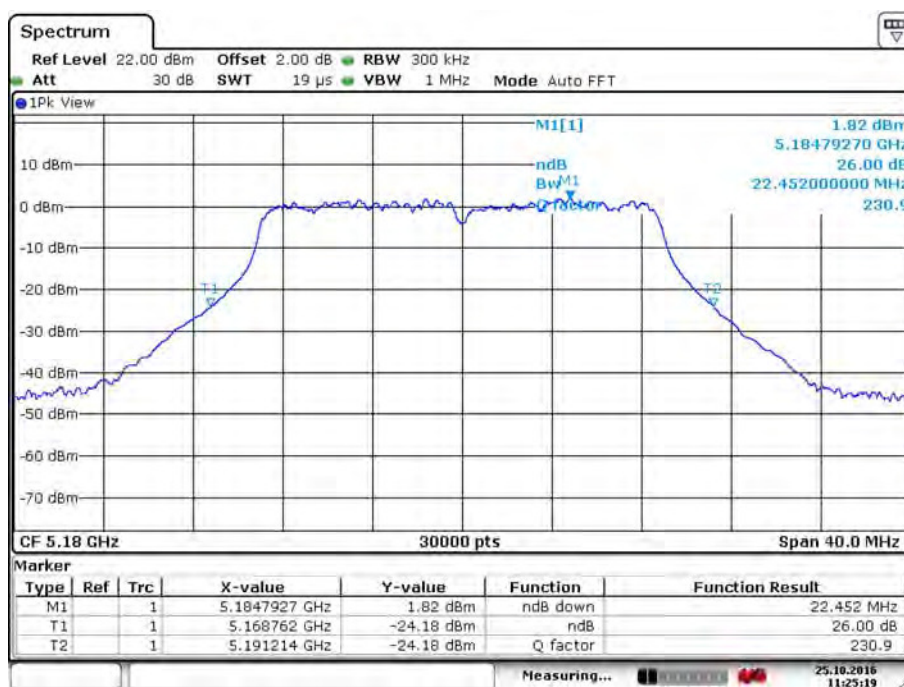
Report No.: SZEM161000852204

Page: 77 of 544

Test mode:	802.11a	Frequency(MHz):	5700
------------	---------	-----------------	------



Test mode:	802.11n(HT20)	Frequency(MHz):	5180
------------	---------------	-----------------	------



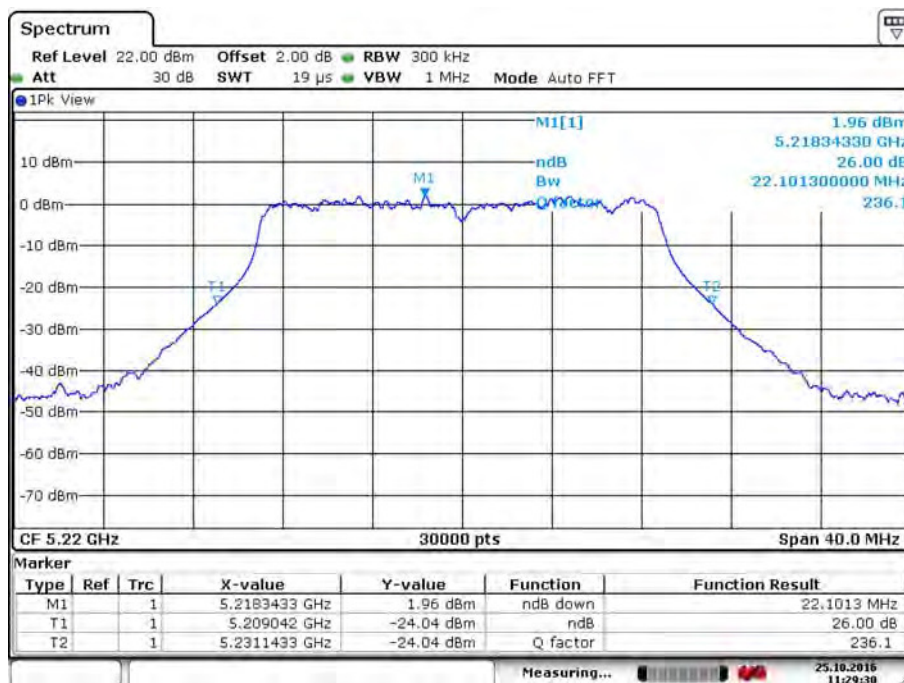


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

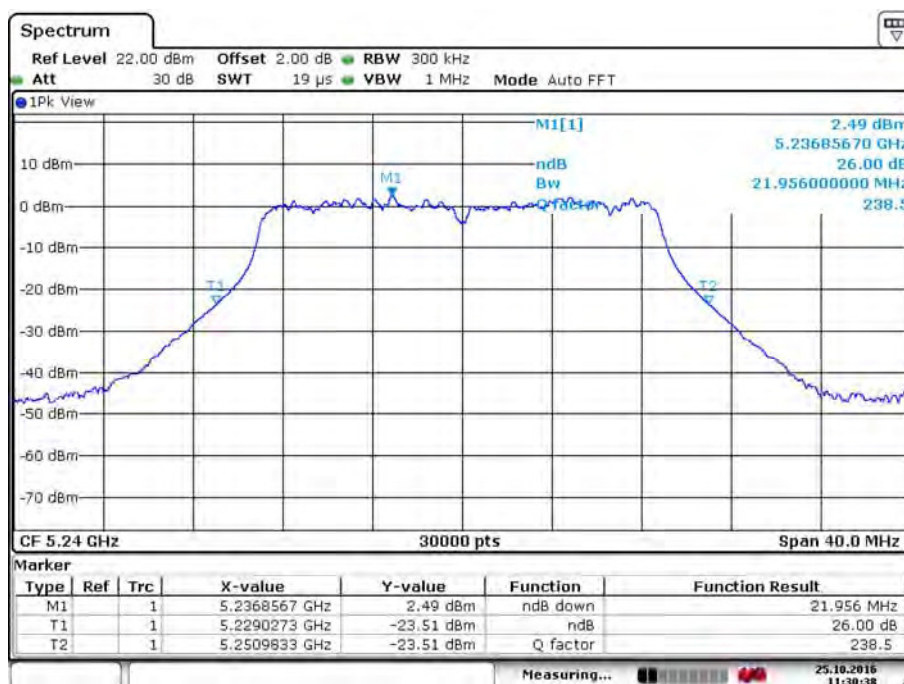
Report No.: SZEM161000852204

Page: 78 of 544

Test mode:	802.11n(HT20)	Frequency(MHz):	5220
------------	---------------	-----------------	------



Test mode:	802.11n(HT20)	Frequency(MHz):	5240
------------	---------------	-----------------	------



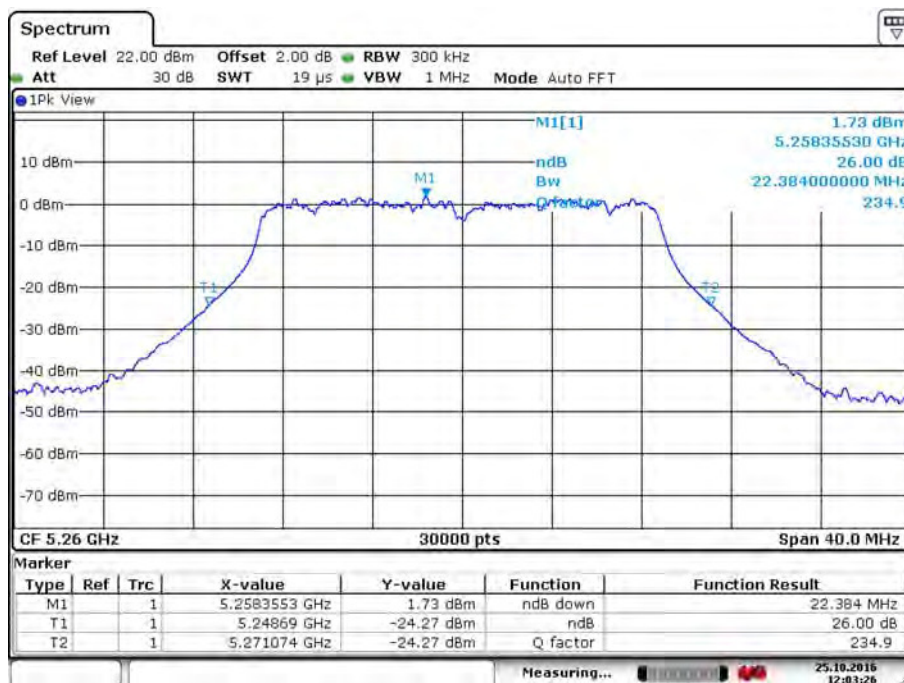


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

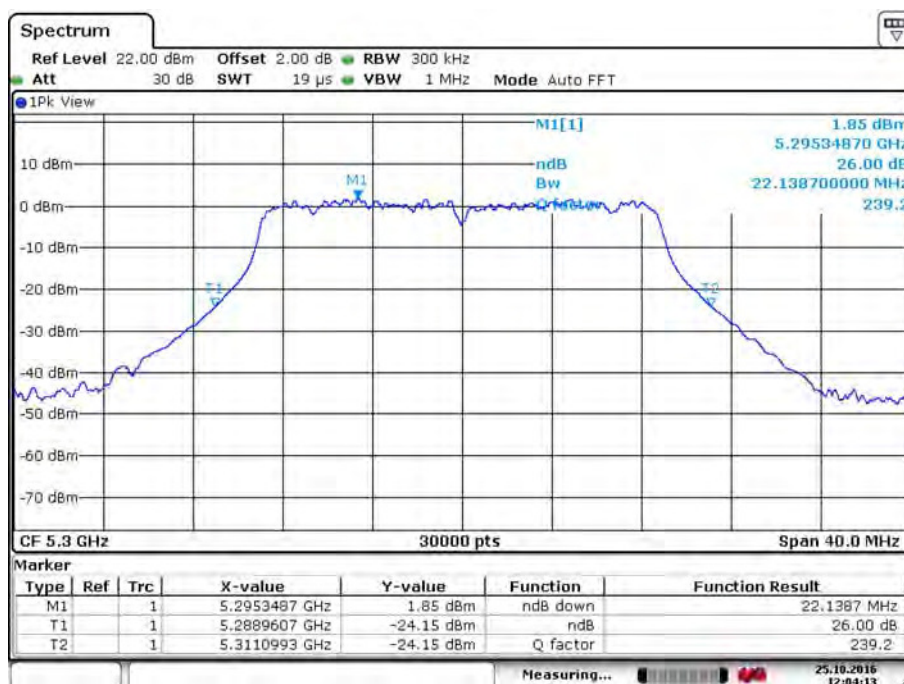
Report No.: SZEM161000852204

Page: 79 of 544

Test mode:	802.11n(HT20)	Frequency(MHz):	5260
------------	---------------	-----------------	------



Test mode:	802.11n(HT20)	Frequency(MHz):	5300
------------	---------------	-----------------	------



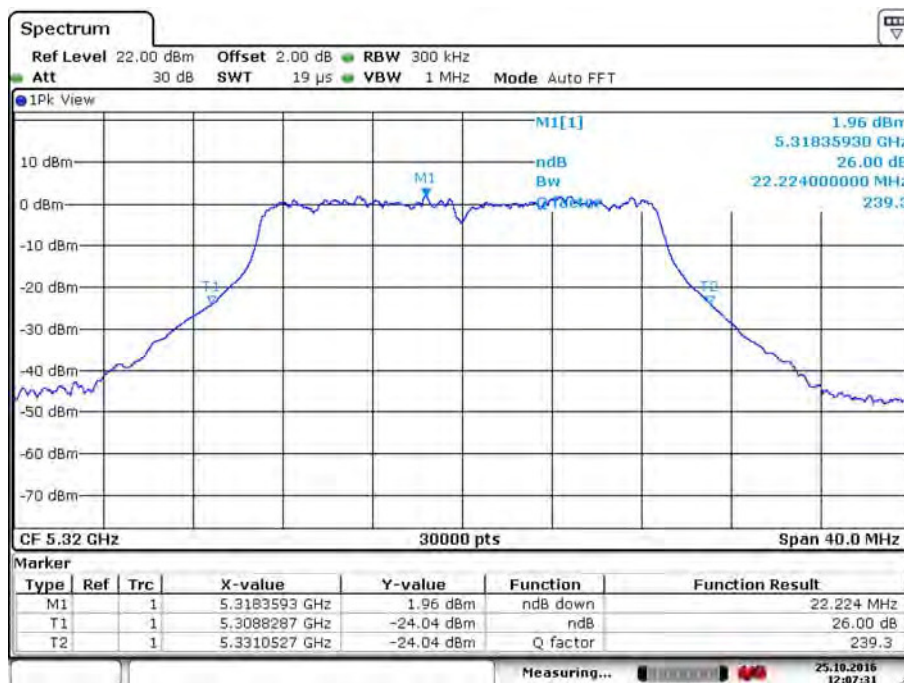


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

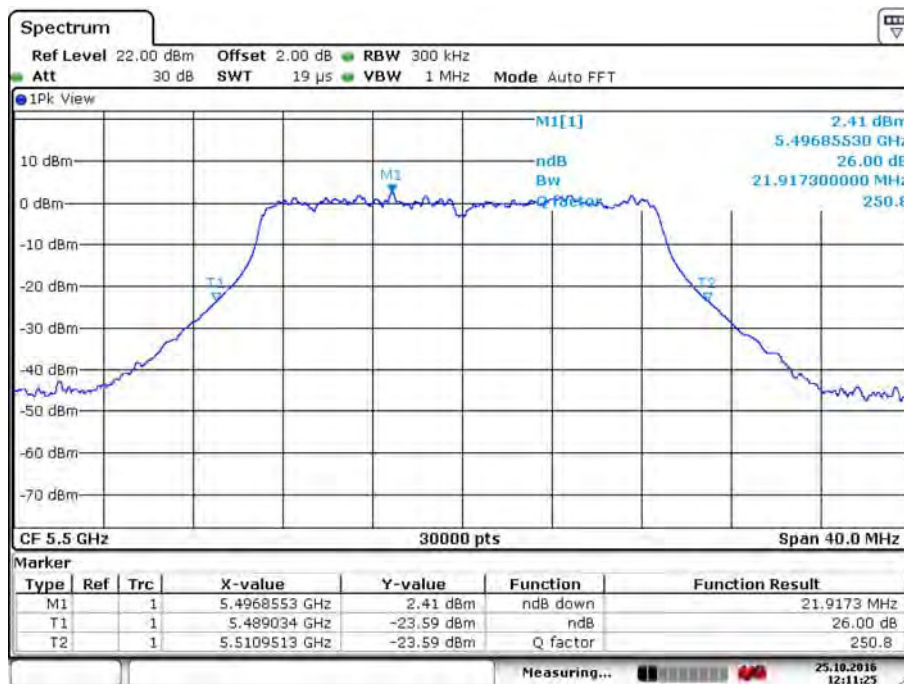
Report No.: SZEM161000852204

Page: 80 of 544

Test mode:	802.11n(HT20)	Frequency(MHz):	5320
------------	---------------	-----------------	------



Test mode:	802.11n(HT20)	Frequency(MHz):	5500
------------	---------------	-----------------	------



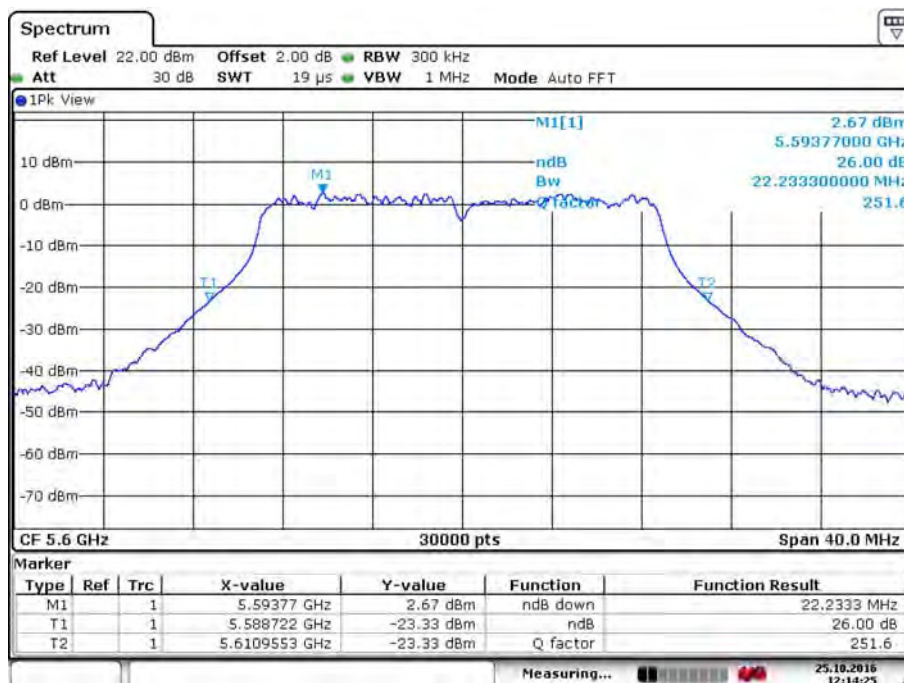


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

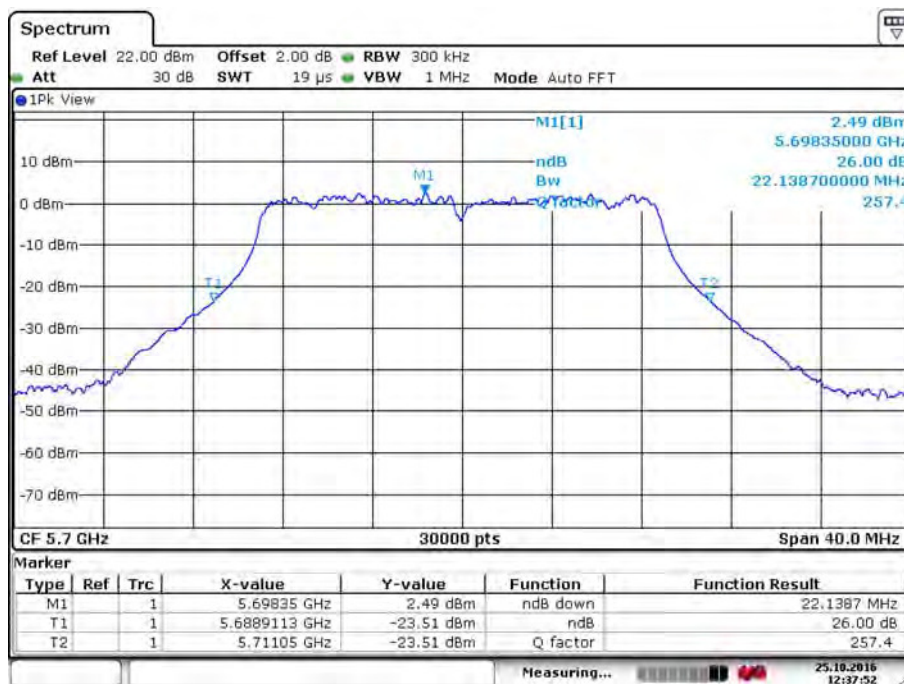
Report No.: SZEM161000852204

Page: 81 of 544

Test mode:	802.11n(HT20)	Frequency(MHz):	5600
------------	---------------	-----------------	------



Test mode:	802.11n(HT20)	Frequency(MHz):	5700
------------	---------------	-----------------	------



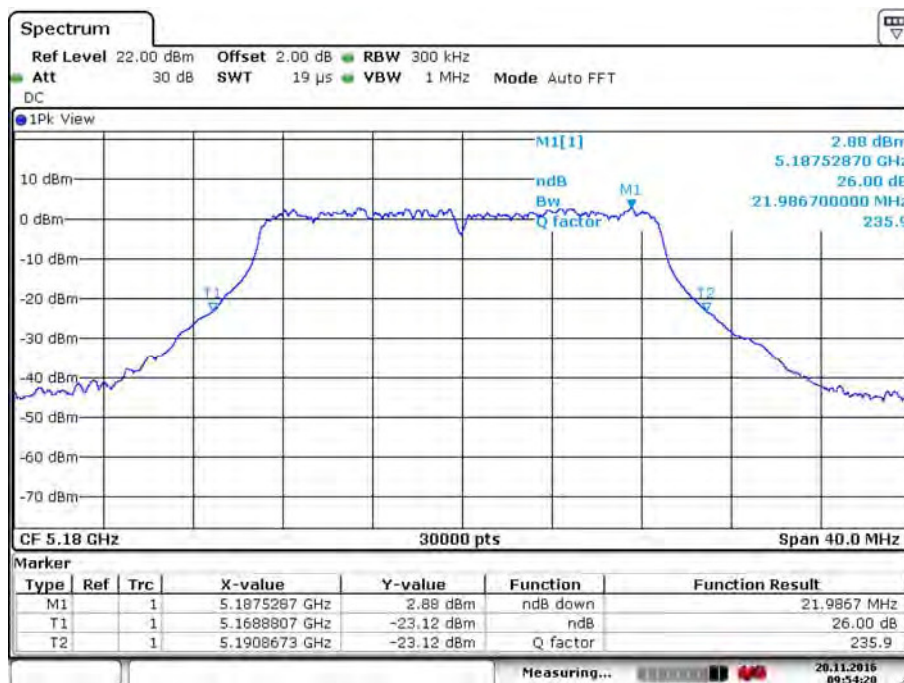


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

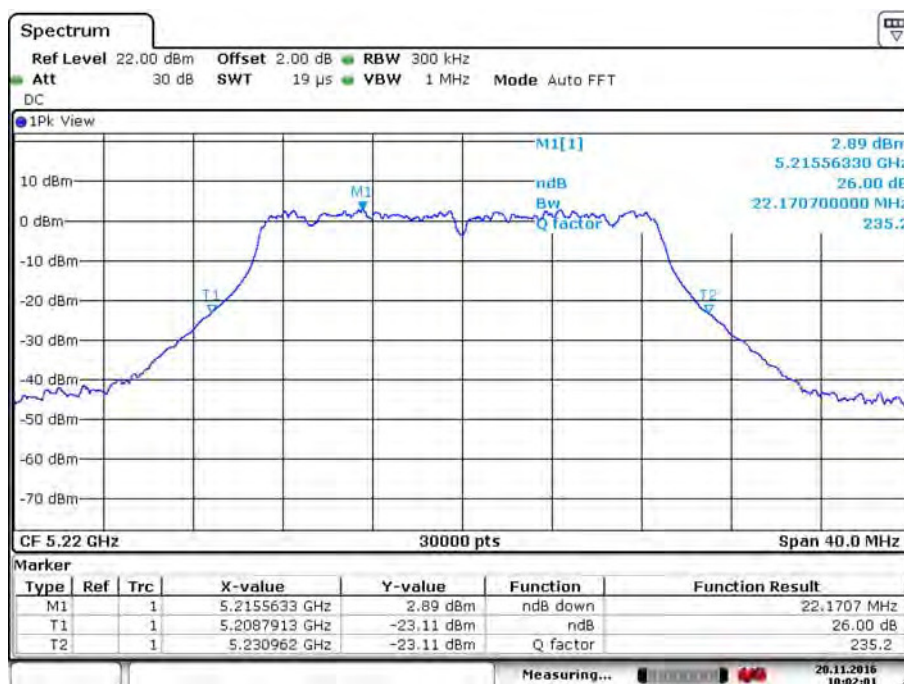
Report No.: SZEM161000852204

Page: 82 of 544

Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5180
------------	--------------------	-----------------	------



Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5220
------------	--------------------	-----------------	------



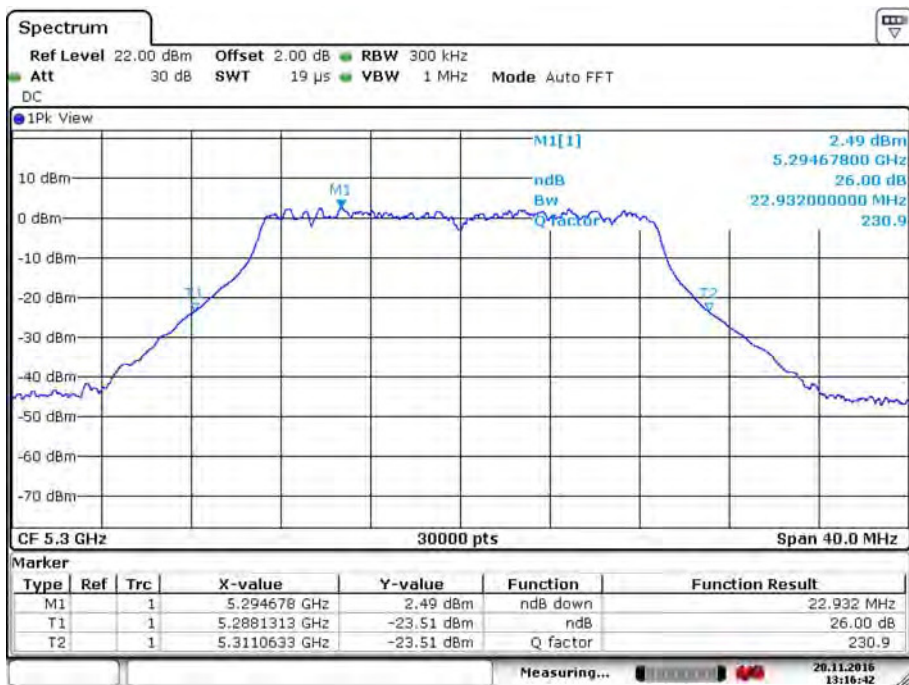


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

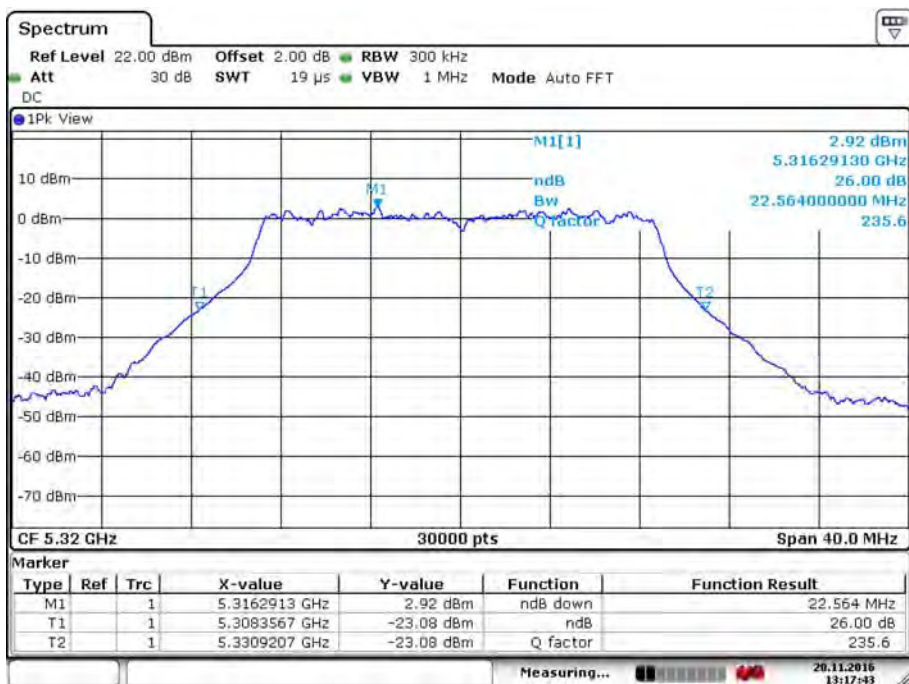
Report No.: SZEM161000852204

Page: 84 of 544

Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5300
------------	--------------------	-----------------	------



Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5320
------------	--------------------	-----------------	------



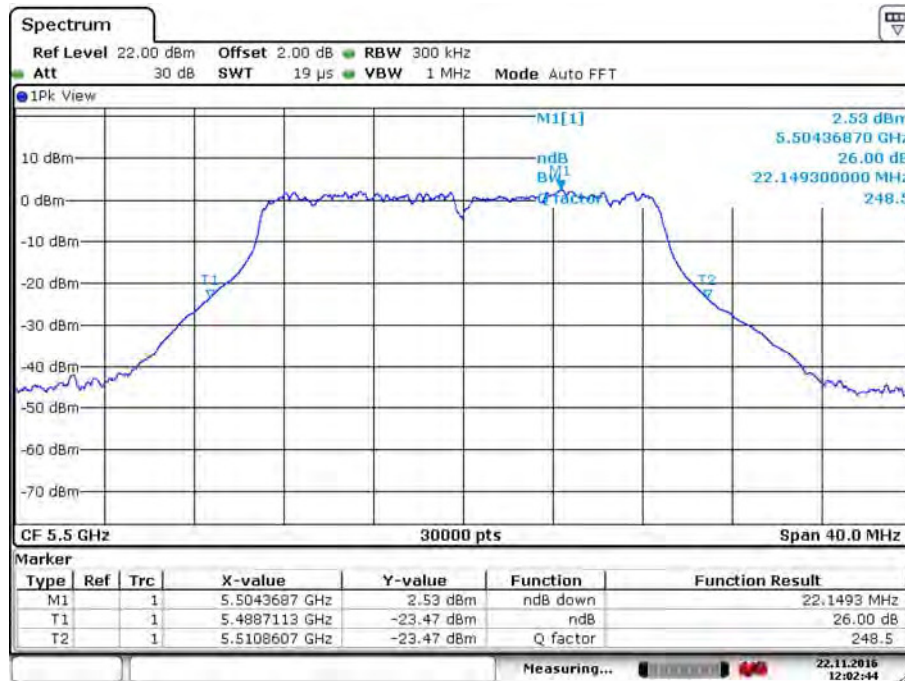


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

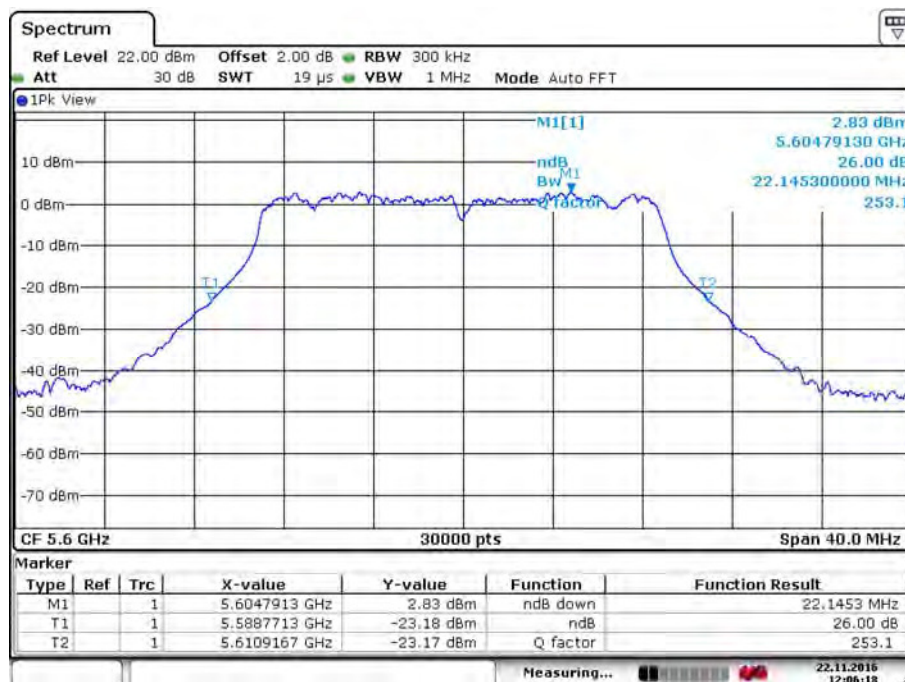
Report No.: SZEM161000852204

Page: 85 of 544

Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5500
------------	--------------------	-----------------	------



Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5600
------------	--------------------	-----------------	------



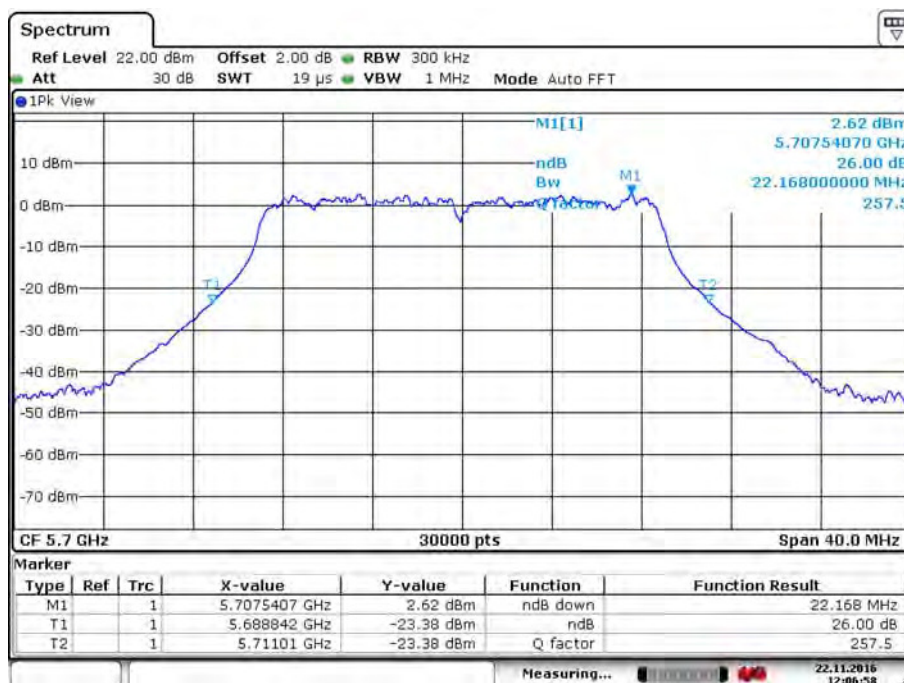


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

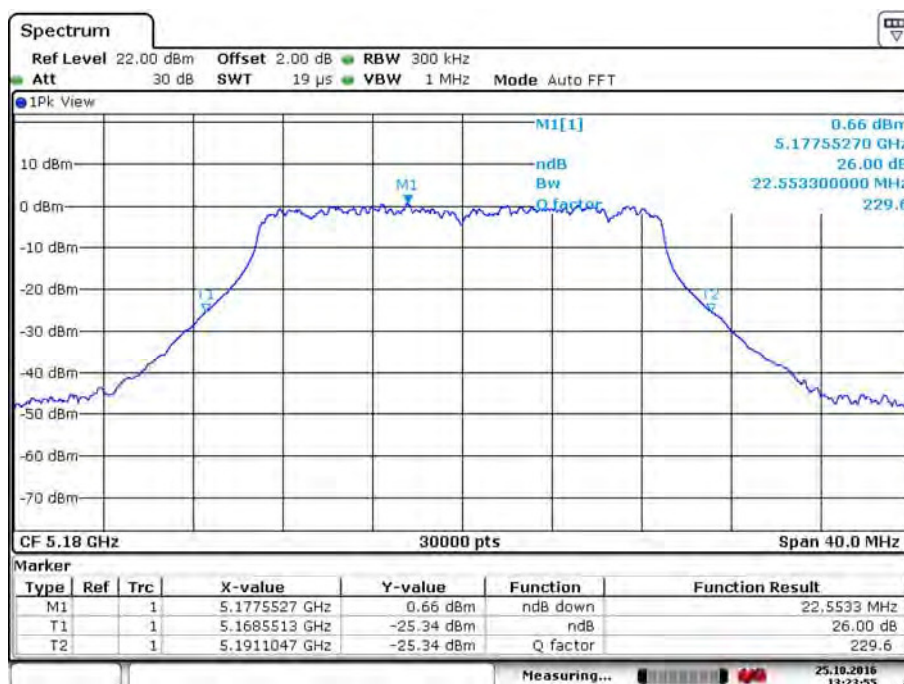
Report No.: SZEM161000852204

Page: 86 of 544

Test mode:	802.11n(HT20) MIMO	Frequency(MHz):	5700
------------	--------------------	-----------------	------



Test mode:	802.11ac(HT20)	Frequency(MHz):	5180
------------	----------------	-----------------	------



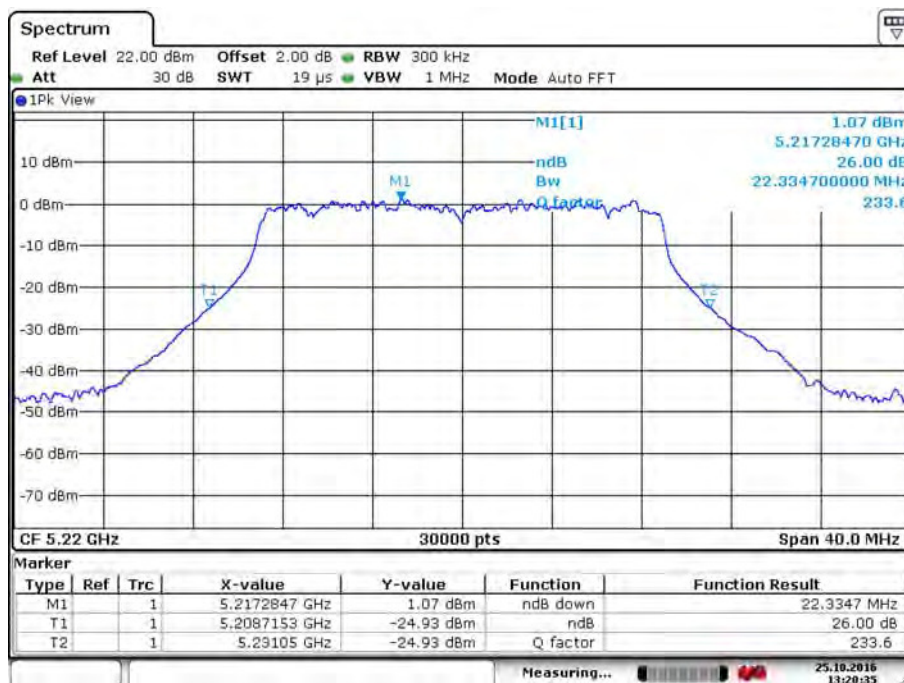


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

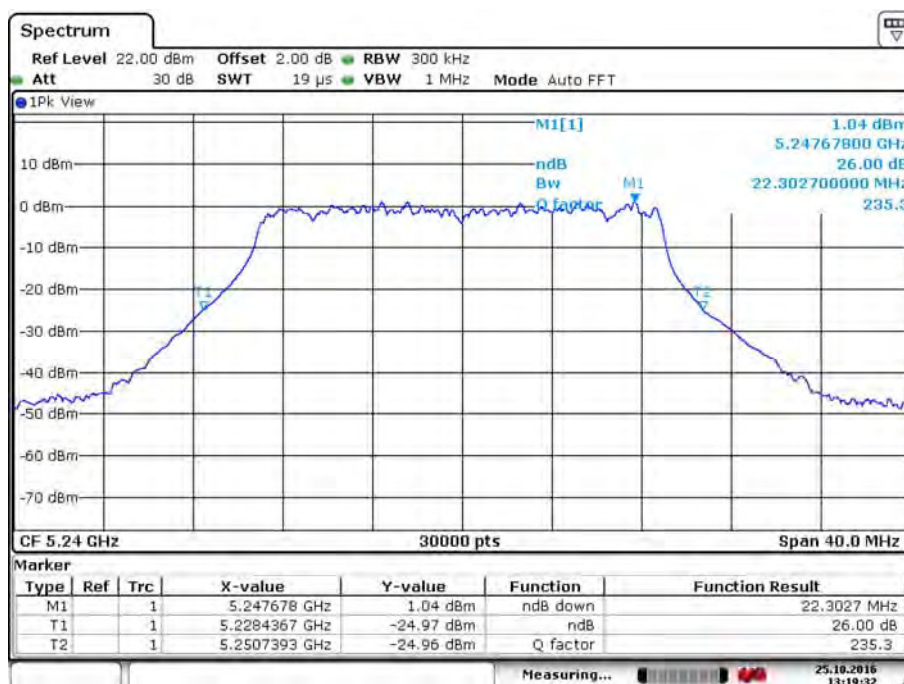
Report No.: SZEM161000852204

Page: 87 of 544

Test mode:	802.11ac(HT20)	Frequency(MHz):	5220
------------	----------------	-----------------	------



Test mode:	802.11ac(HT20)	Frequency(MHz):	5240
------------	----------------	-----------------	------



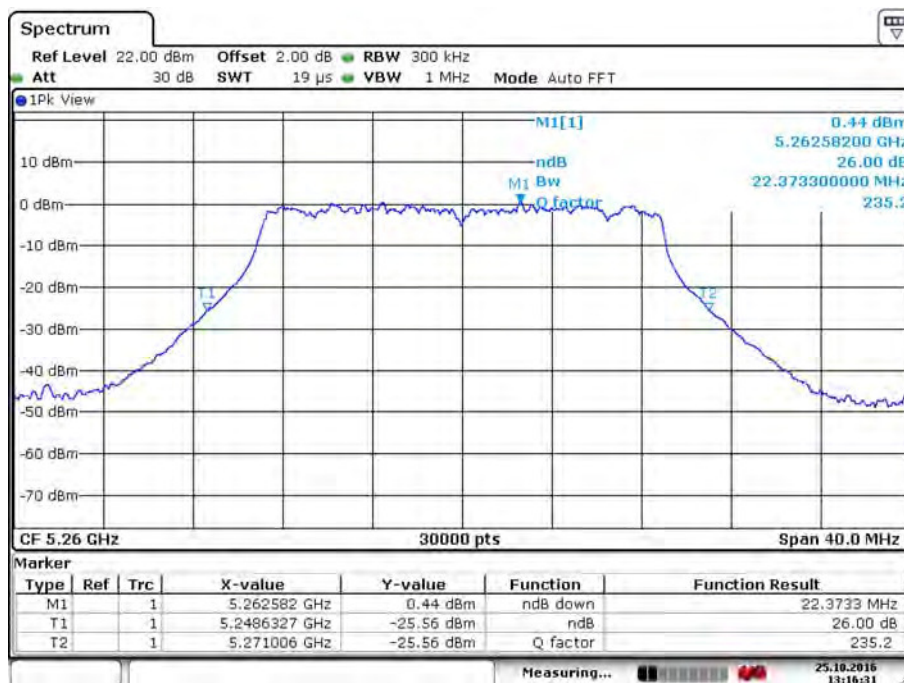


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

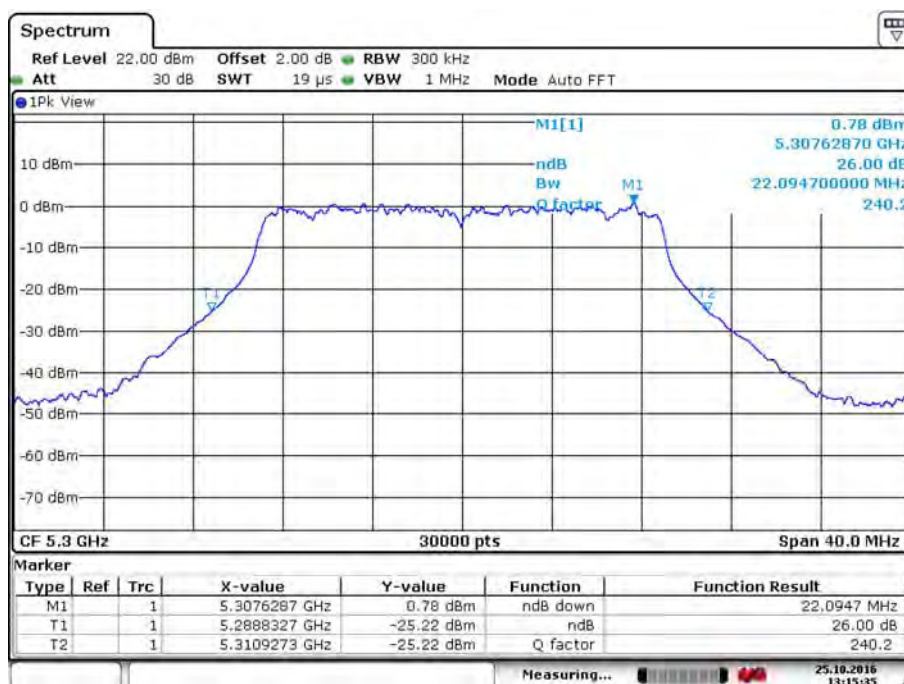
Report No.: SZEM161000852204

Page: 88 of 544

Test mode:	802.11ac(HT20)	Frequency(MHz):	5260
------------	----------------	-----------------	------



Test mode:	802.11ac(HT20)	Frequency(MHz):	5300
------------	----------------	-----------------	------



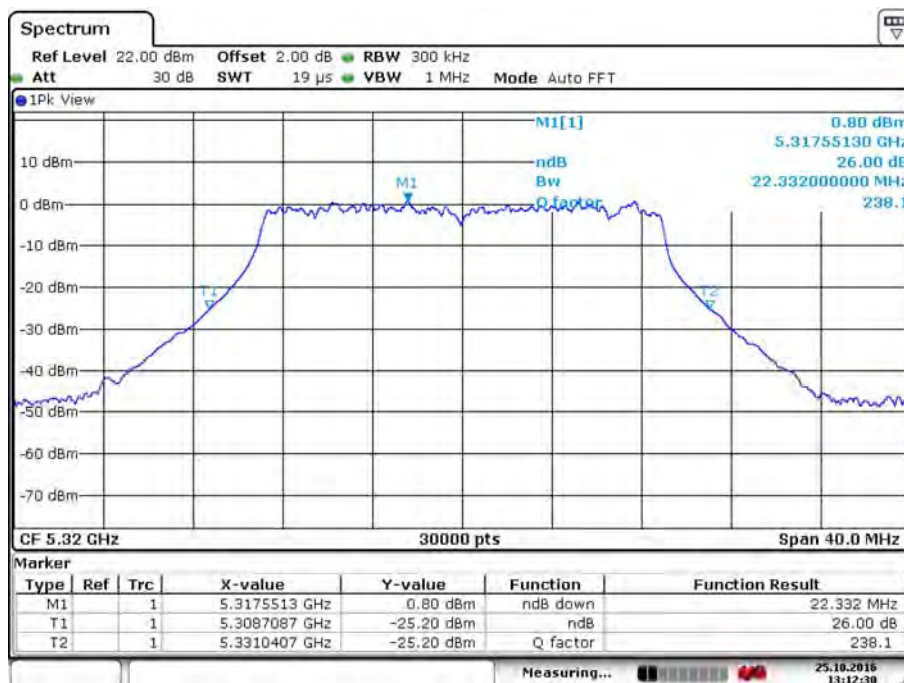


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

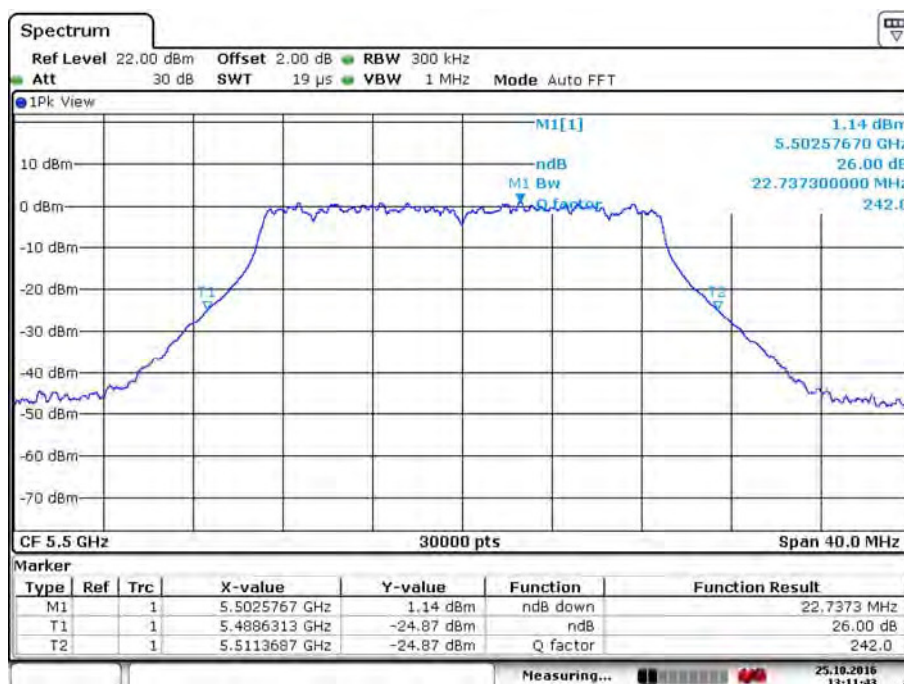
Report No.: SZEM161000852204

Page: 89 of 544

Test mode:	802.11ac(HT20)	Frequency(MHz):	5320
------------	----------------	-----------------	------



Test mode:	802.11ac(HT20)	Frequency(MHz):	5500
------------	----------------	-----------------	------



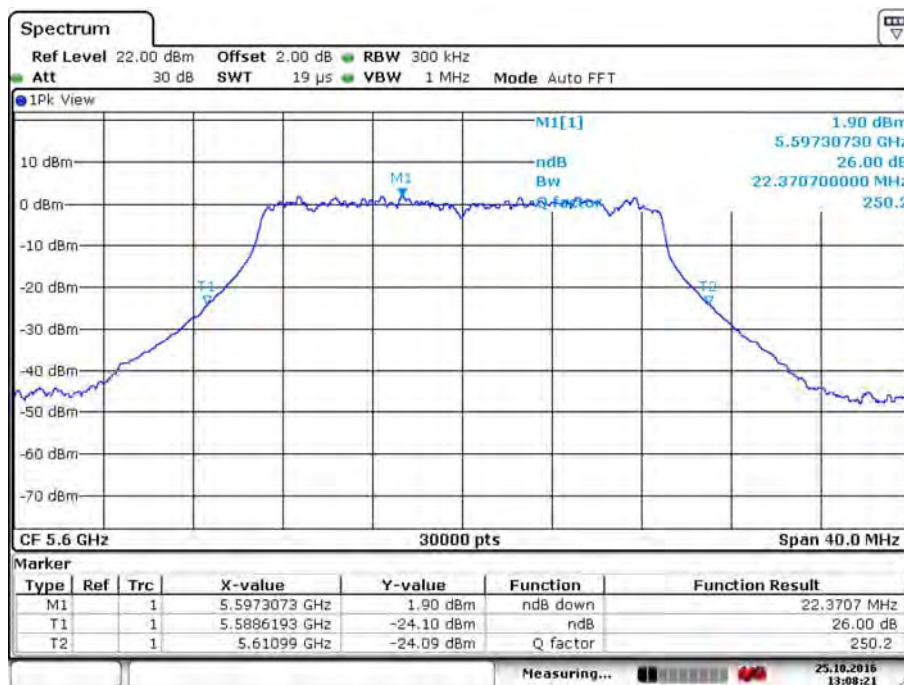


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

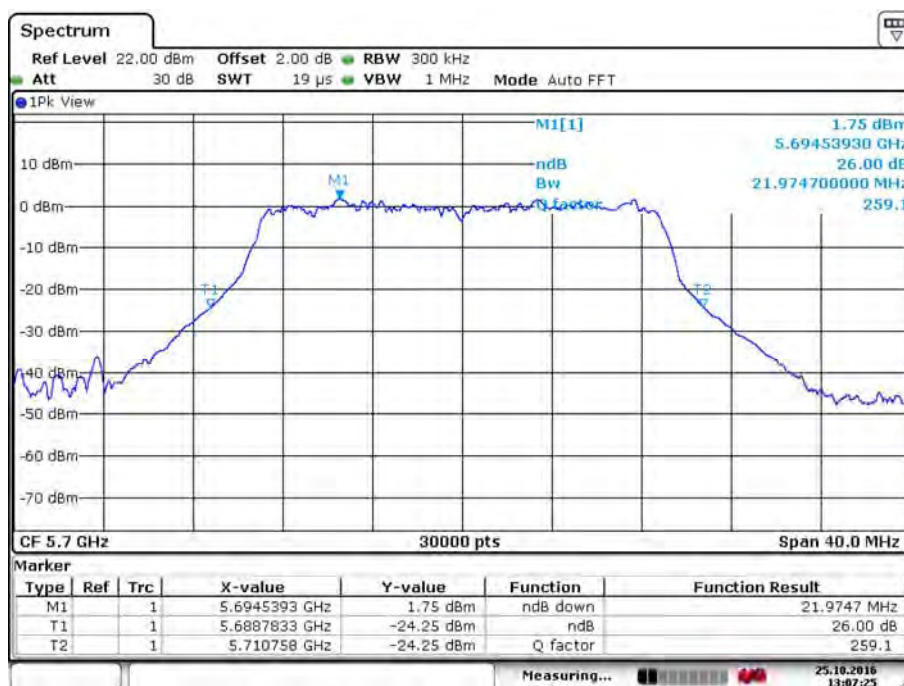
Report No.: SZEM161000852204

Page: 90 of 544

Test mode:	802.11ac(HT20)	Frequency(MHz):	5600
------------	----------------	-----------------	------



Test mode:	802.11ac(HT20)	Frequency(MHz):	5700
------------	----------------	-----------------	------



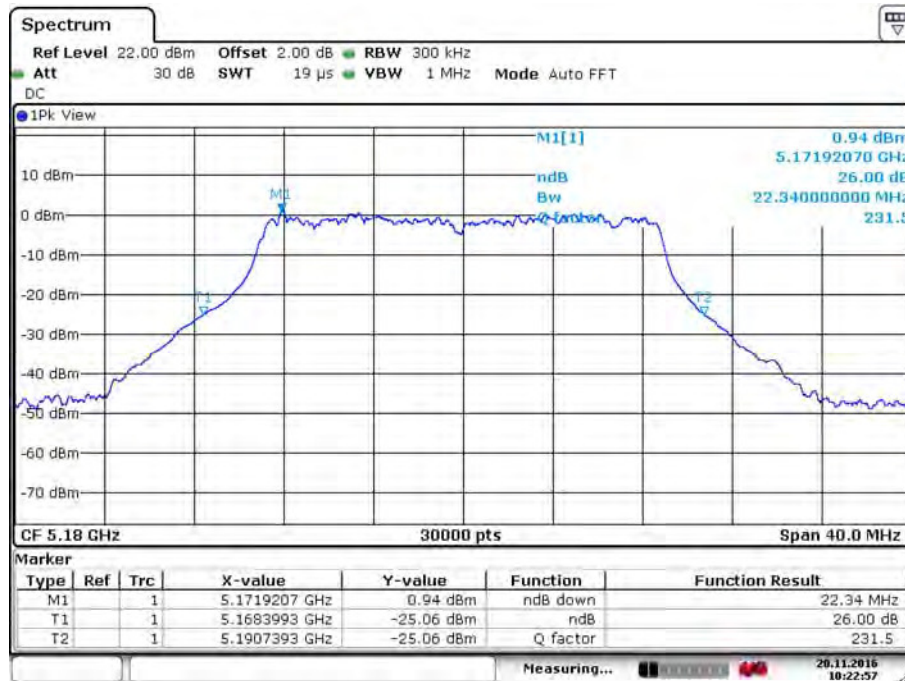


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

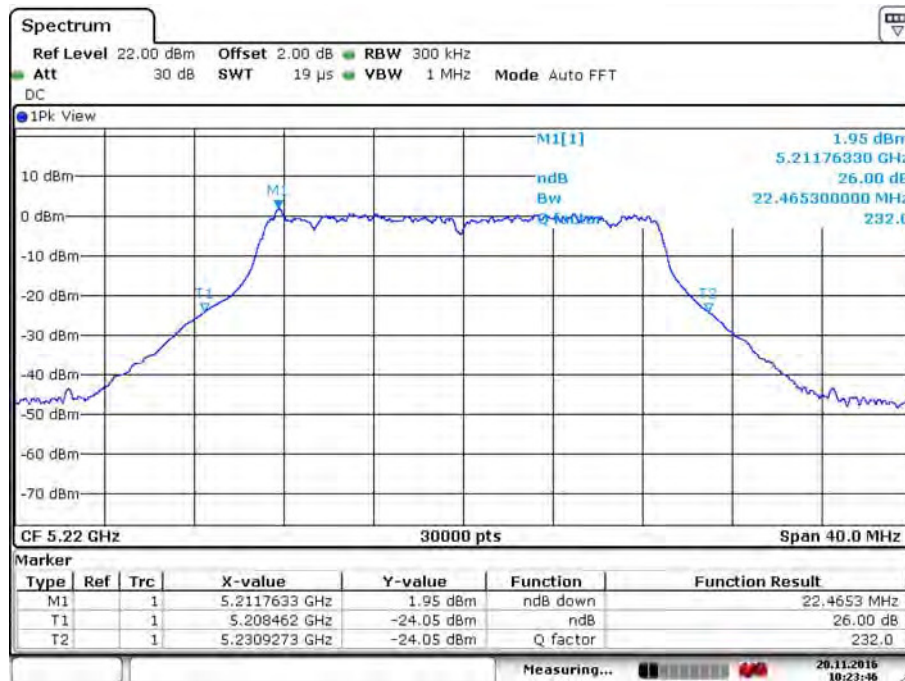
Report No.: SZEM161000852204

Page: 91 of 544

Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5180
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5220
------------	---------------------	-----------------	------



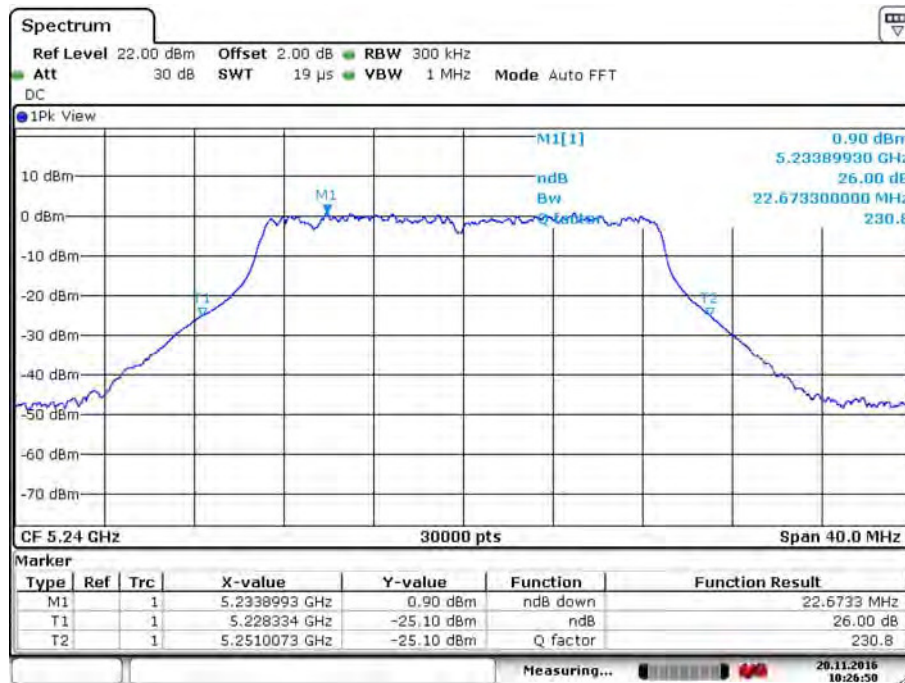


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM161000852204

Page: 92 of 544

Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5240
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5260
------------	---------------------	-----------------	------



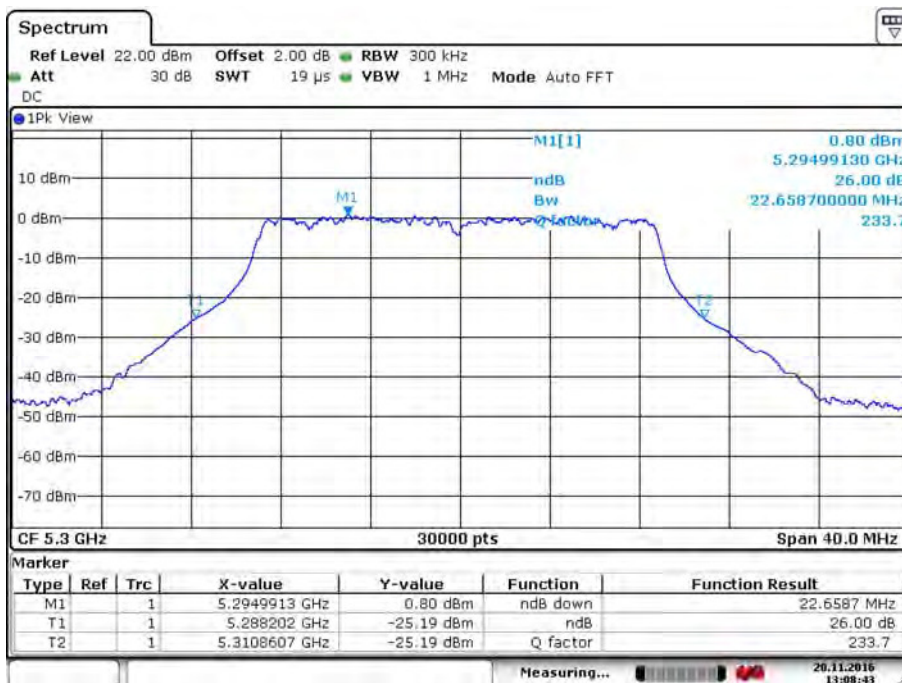


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

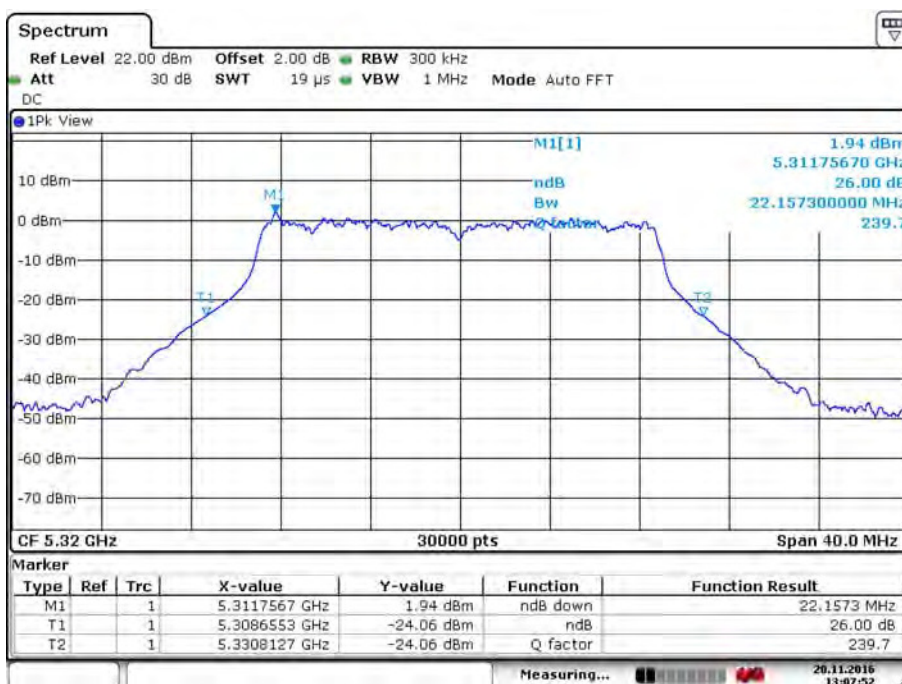
Report No.: SZEM161000852204

Page: 93 of 544

Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5300
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5320
------------	---------------------	-----------------	------



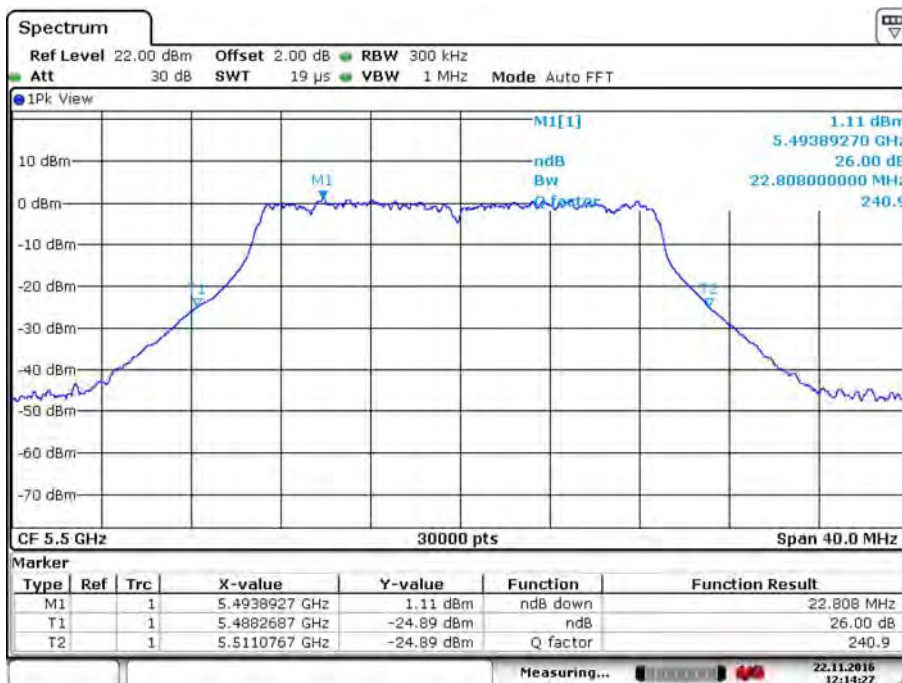


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

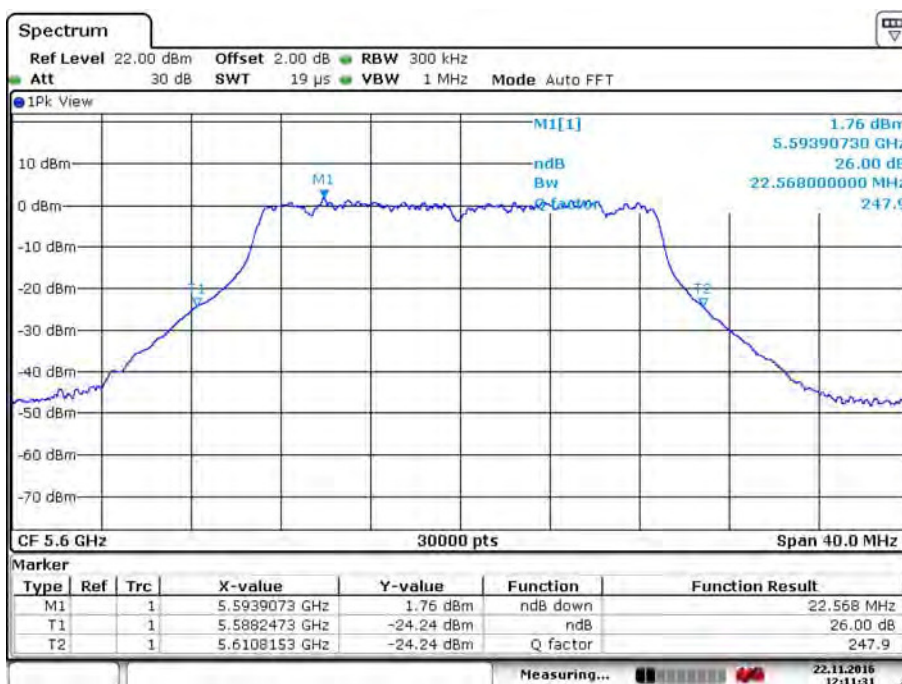
Report No.: SZEM161000852204

Page: 94 of 544

Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5500
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5600
------------	---------------------	-----------------	------



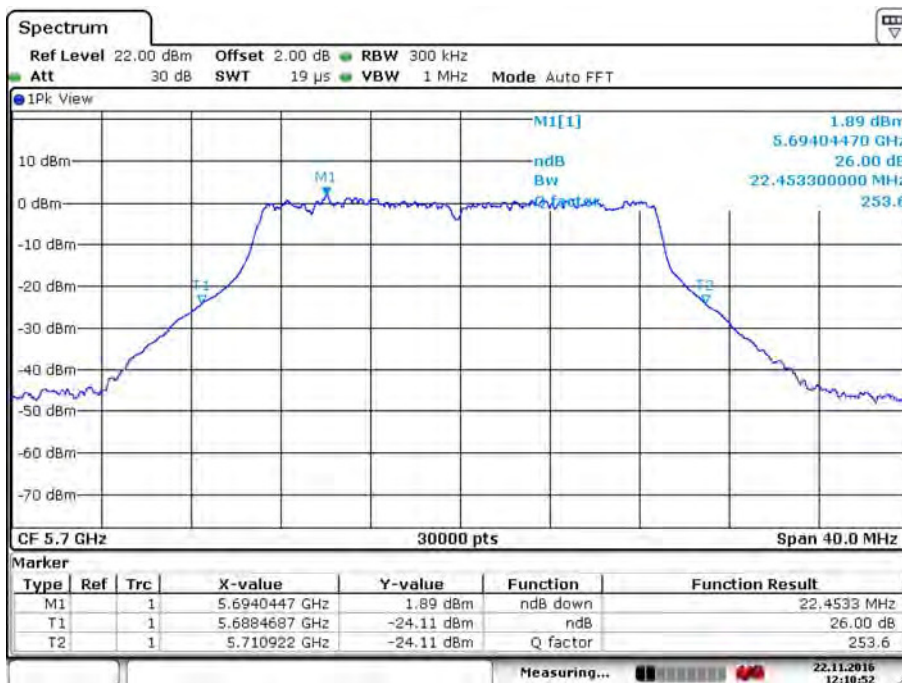


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

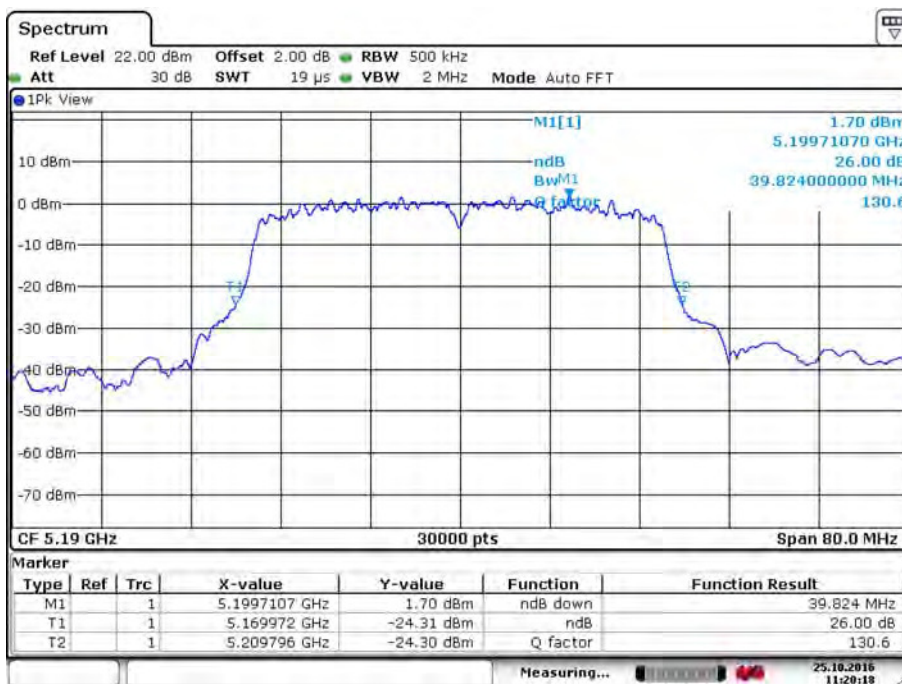
Report No.: SZEM161000852204

Page: 95 of 544

Test mode:	802.11ac(HT20) MIMO	Frequency(MHz):	5700
------------	---------------------	-----------------	------



Test mode:	802.11n(HT40)	Frequency(MHz):	5190
------------	---------------	-----------------	------



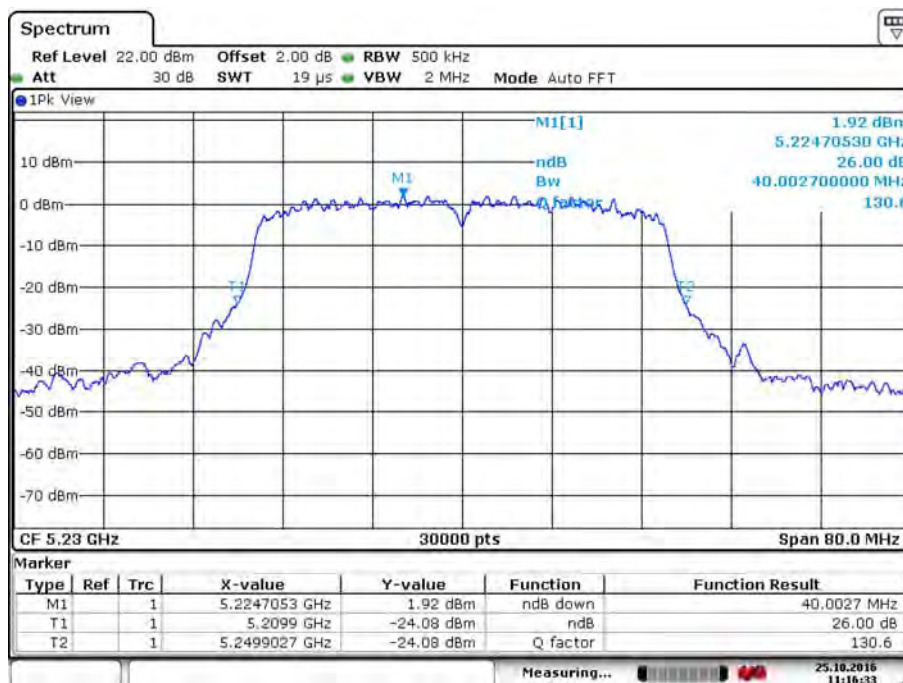


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

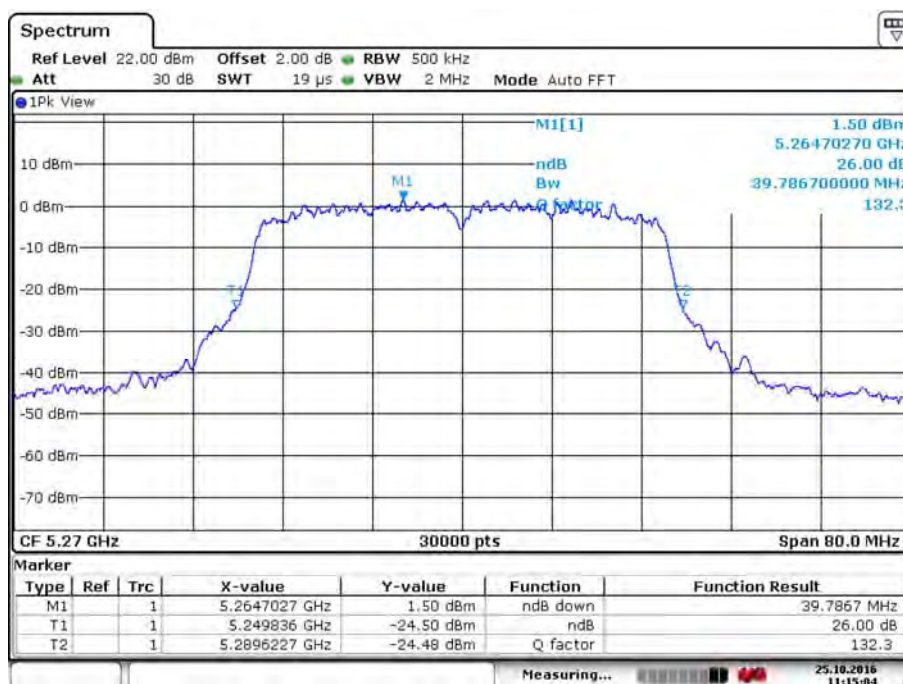
Report No.: SZEM161000852204

Page: 96 of 544

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



Test mode:	802.11n(HT40)	Frequency(MHz):	5270
------------	---------------	-----------------	------





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

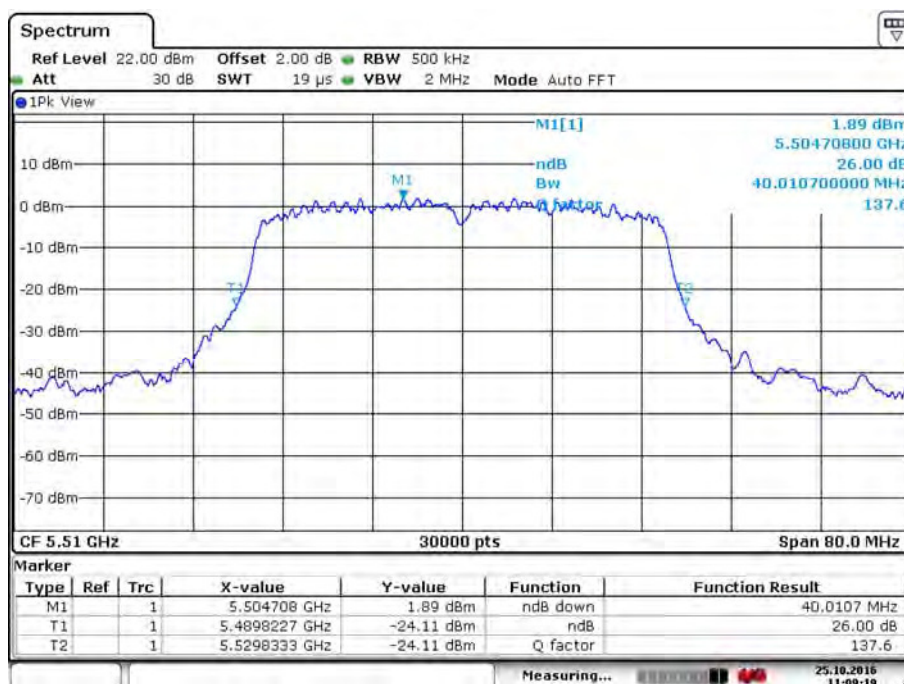
Report No.: SZEM161000852204

Page: 97 of 544

Test mode:	802.11n(HT40)	Frequency(MHz):	5310
------------	---------------	-----------------	------



Test mode:	802.11n(HT40)	Frequency(MHz):	5510
------------	---------------	-----------------	------



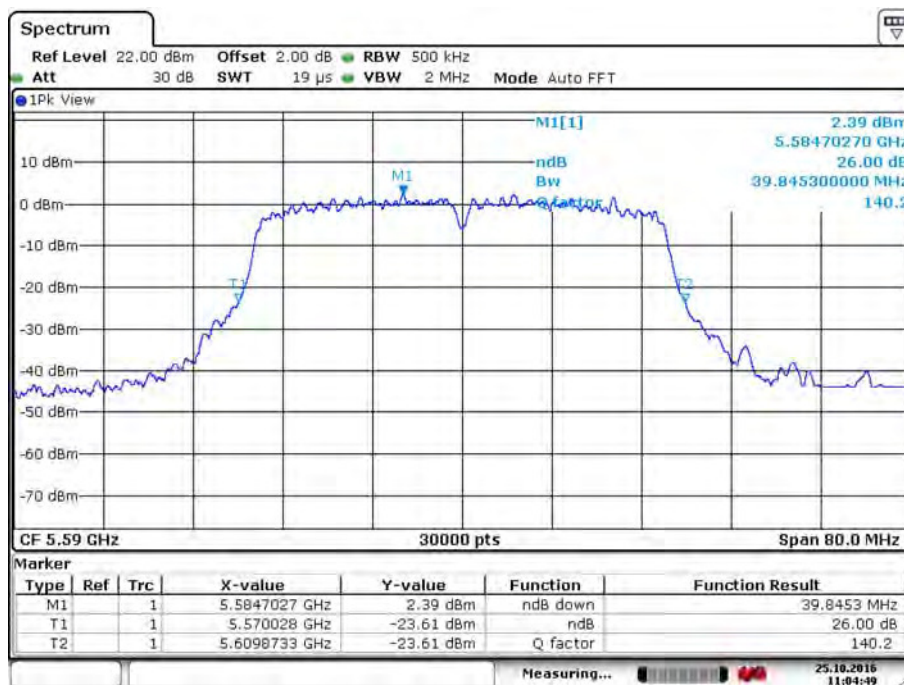


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM161000852204

Page: 98 of 544

Test mode:	802.11n(HT40)	Frequency(MHz):	5590
------------	---------------	-----------------	------



Test mode:	802.11n(HT40)	Frequency(MHz):	5670
------------	---------------	-----------------	------



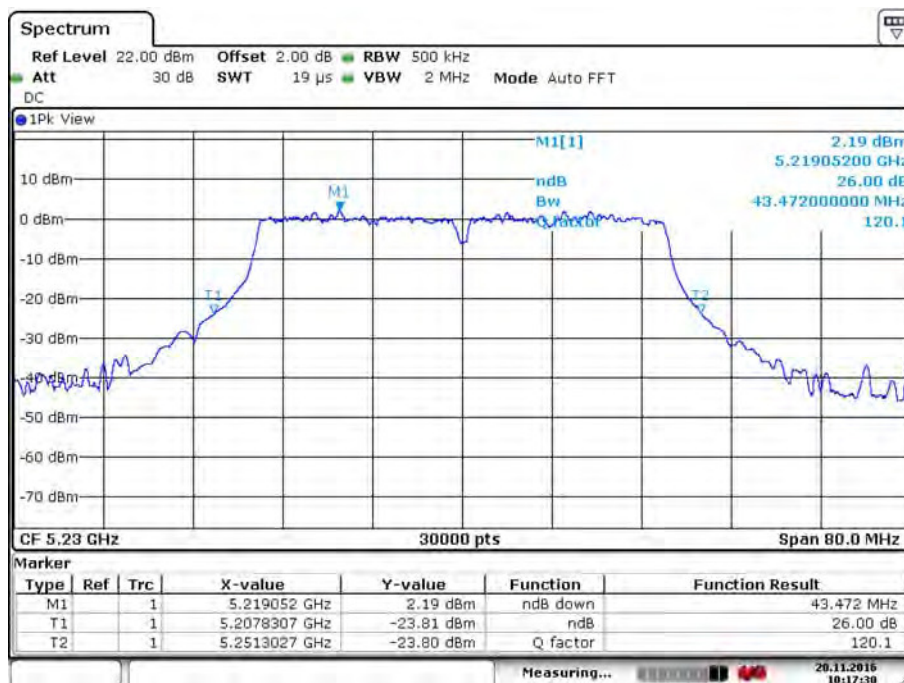


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

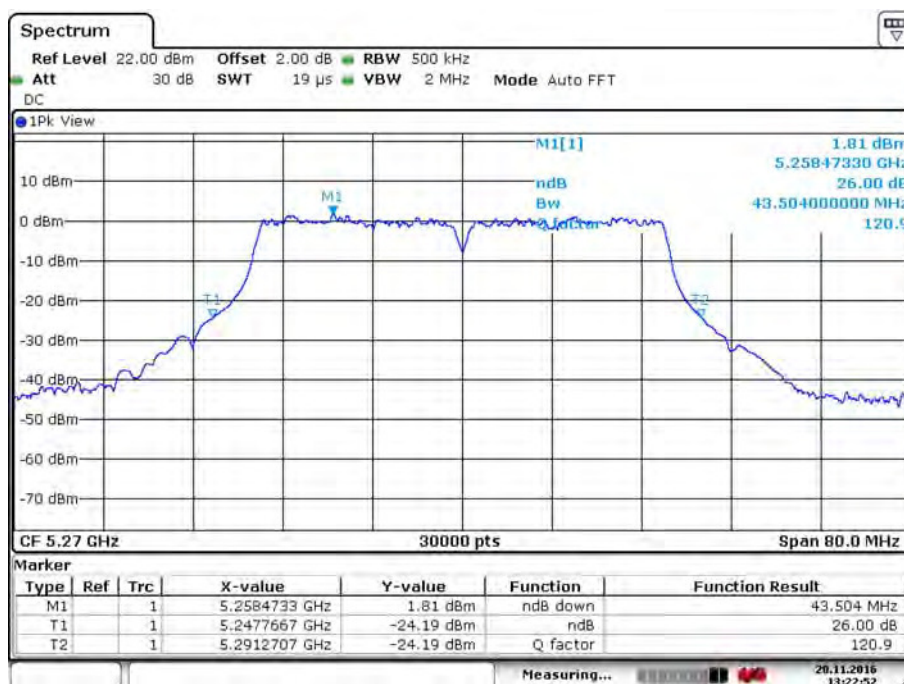
Report No.: SZEM161000852204

Page: 99 of 544

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



Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5270
------------	--------------------	-----------------	------





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

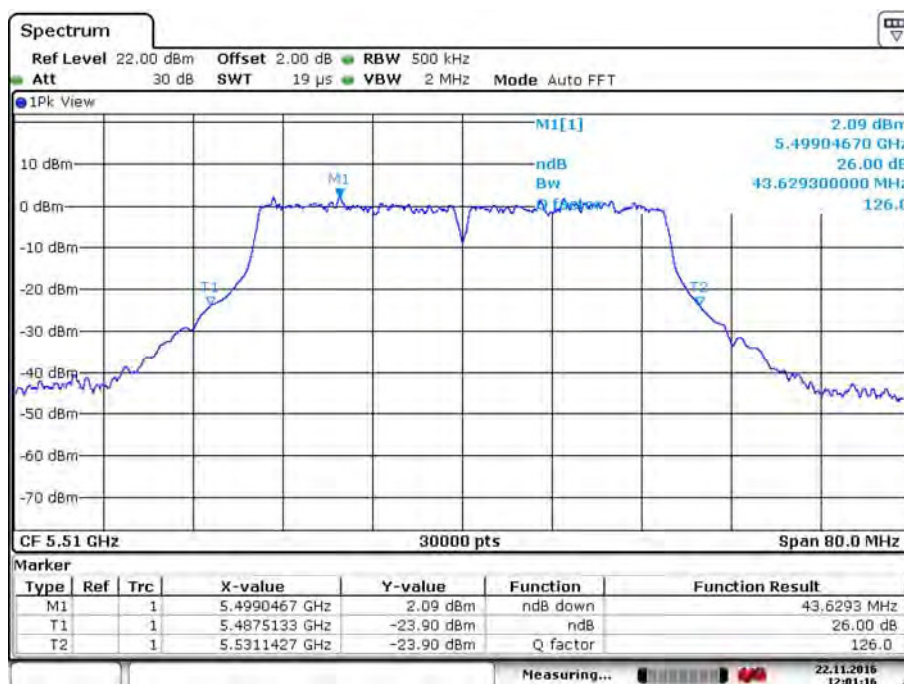
Report No.: SZEM161000852204

Page: 100 of 544

Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5310
------------	--------------------	-----------------	------



Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5510
------------	--------------------	-----------------	------



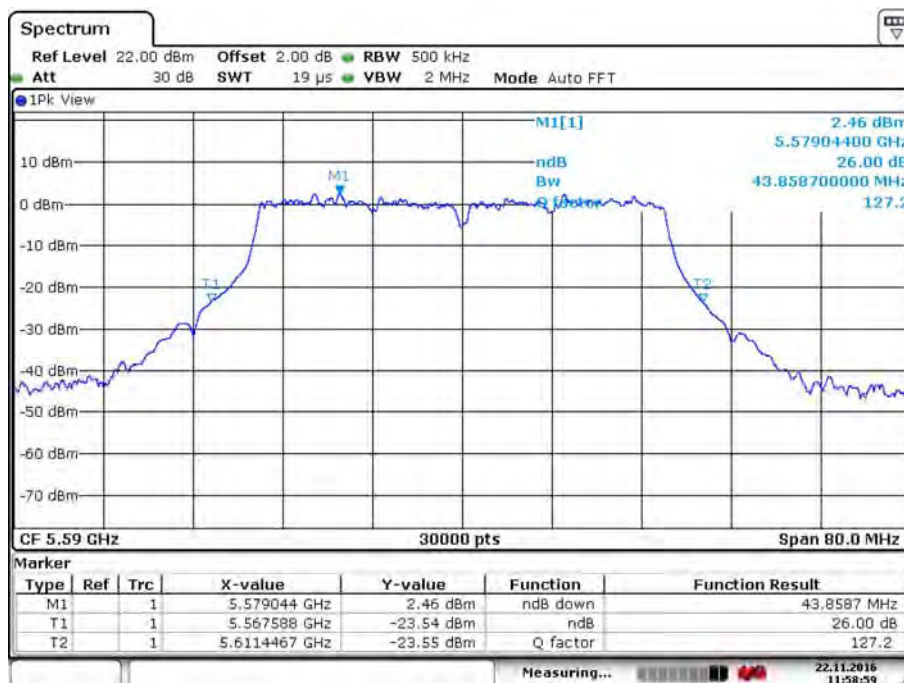


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

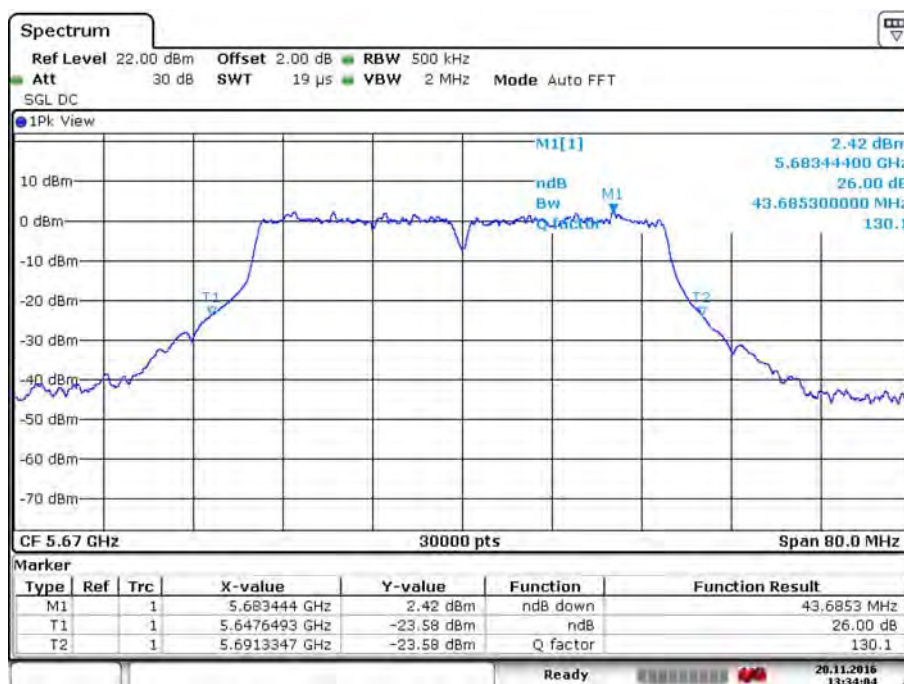
Report No.: SZEM161000852204

Page: 101 of 544

Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5590
------------	--------------------	-----------------	------



Test mode:	802.11n(HT40) MIMO	Frequency(MHz):	5670
------------	--------------------	-----------------	------



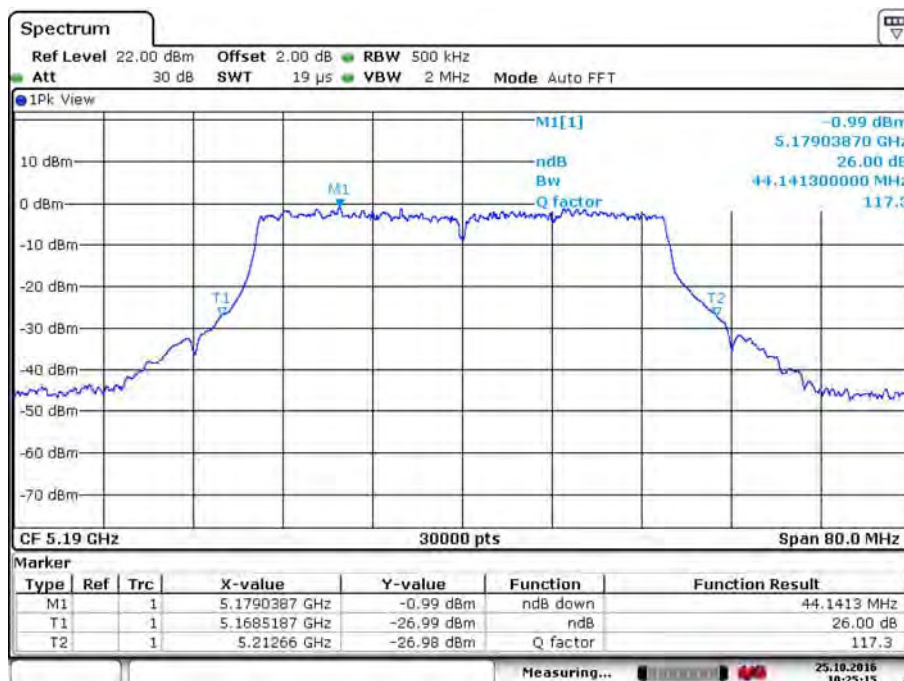


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

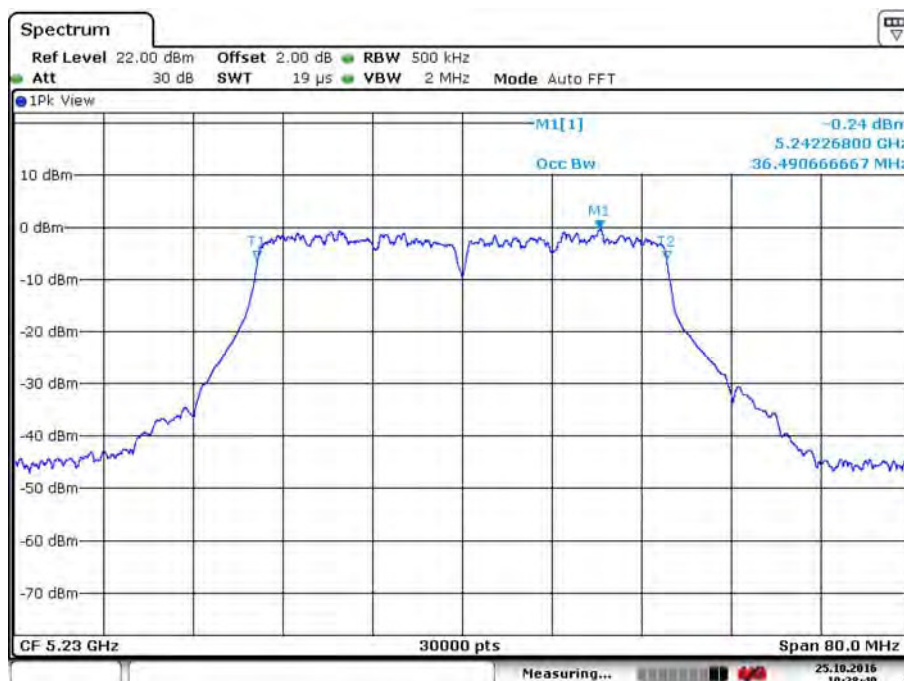
Report No.: SZEM161000852204

Page: 102 of 544

Test mode:	802.11ac(HT40)	Frequency(MHz):	5190
------------	----------------	-----------------	------



Test mode:	802.11ac(HT40)	Frequency(MHz):	5230
------------	----------------	-----------------	------



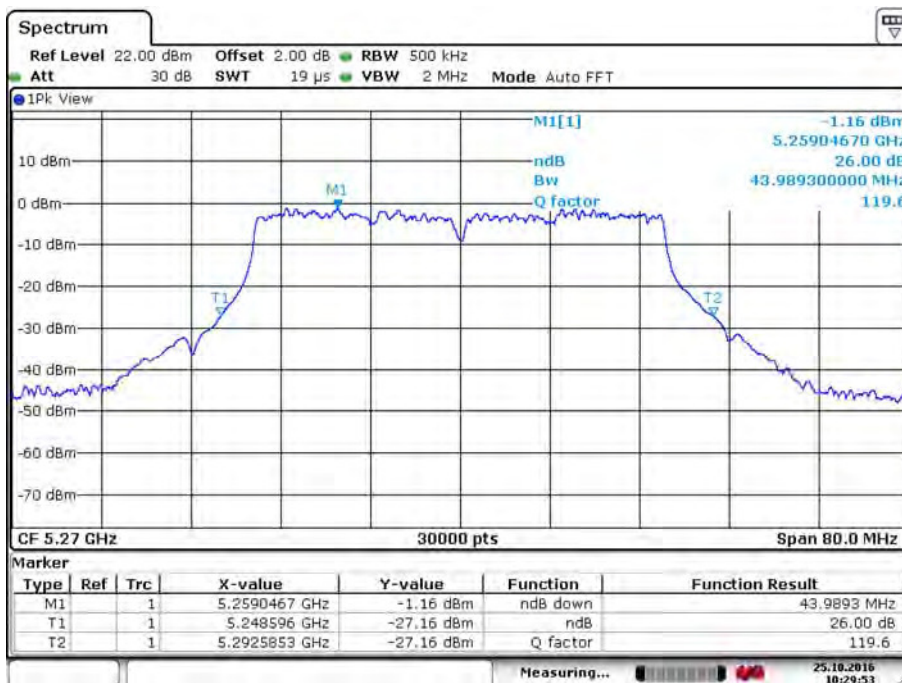


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

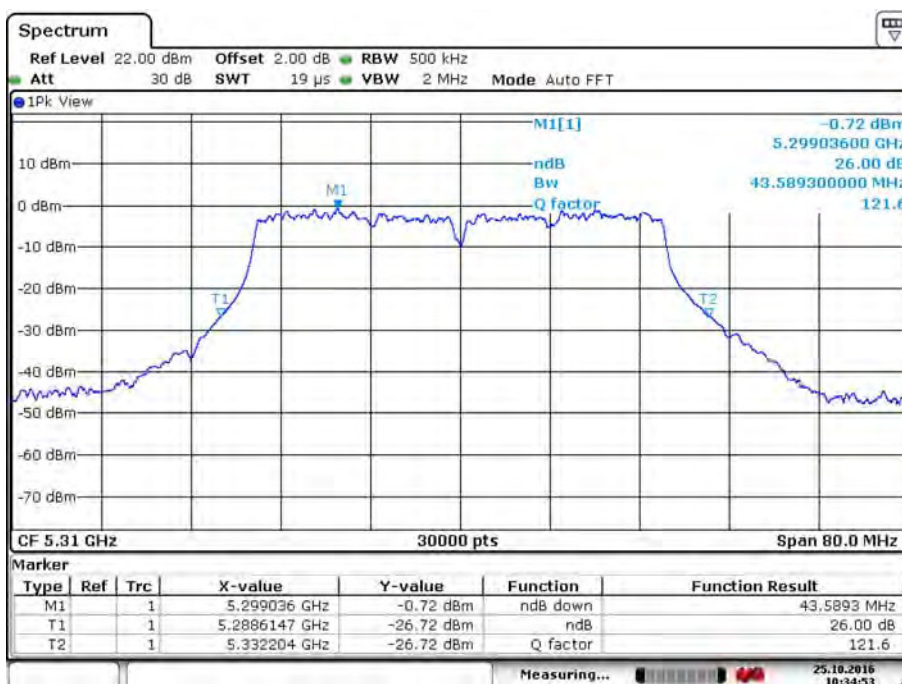
Report No.: SZEM161000852204

Page: 103 of 544

Test mode:	802.11ac(HT40)	Frequency(MHz):	5270
------------	----------------	-----------------	------



Test mode:	802.11ac(HT40)	Frequency(MHz):	5310
------------	----------------	-----------------	------



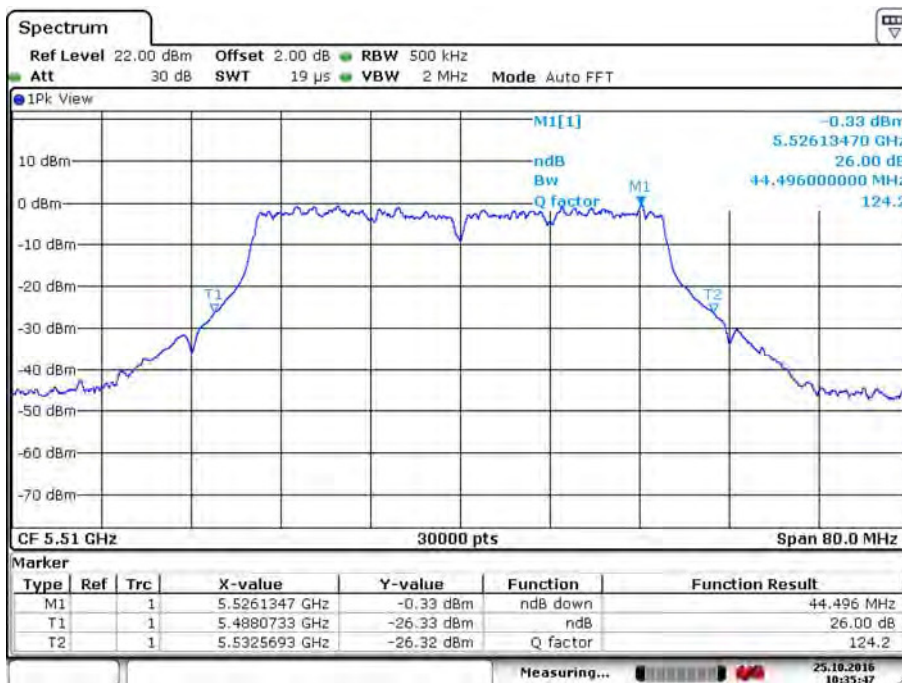


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

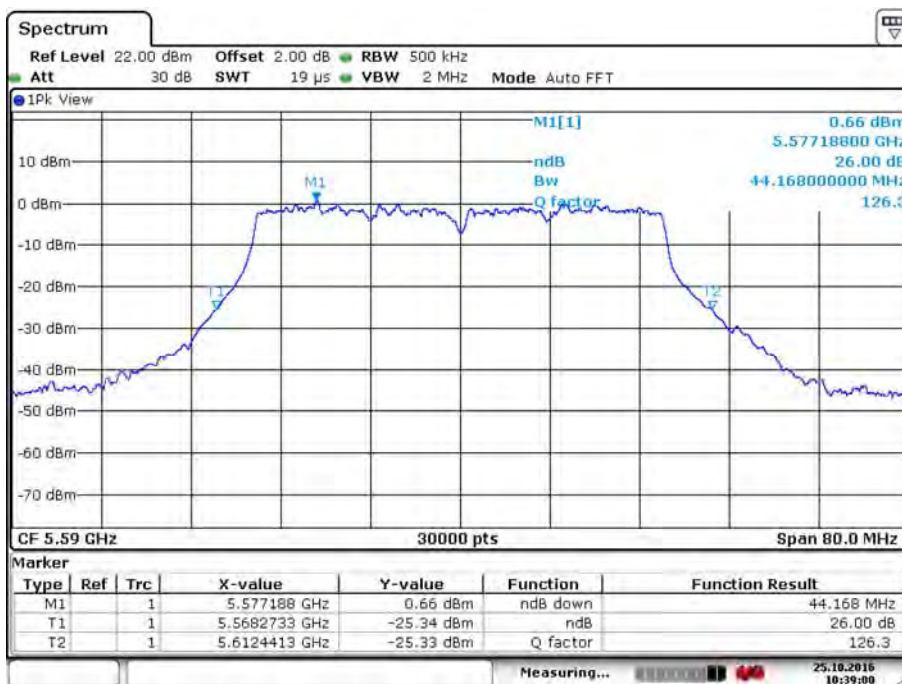
Report No.: SZEM161000852204

Page: 104 of 544

Test mode:	802.11ac(HT40)	Frequency(MHz):	5510
------------	----------------	-----------------	------



Test mode:	802.11ac(HT40)	Frequency(MHz):	5590
------------	----------------	-----------------	------



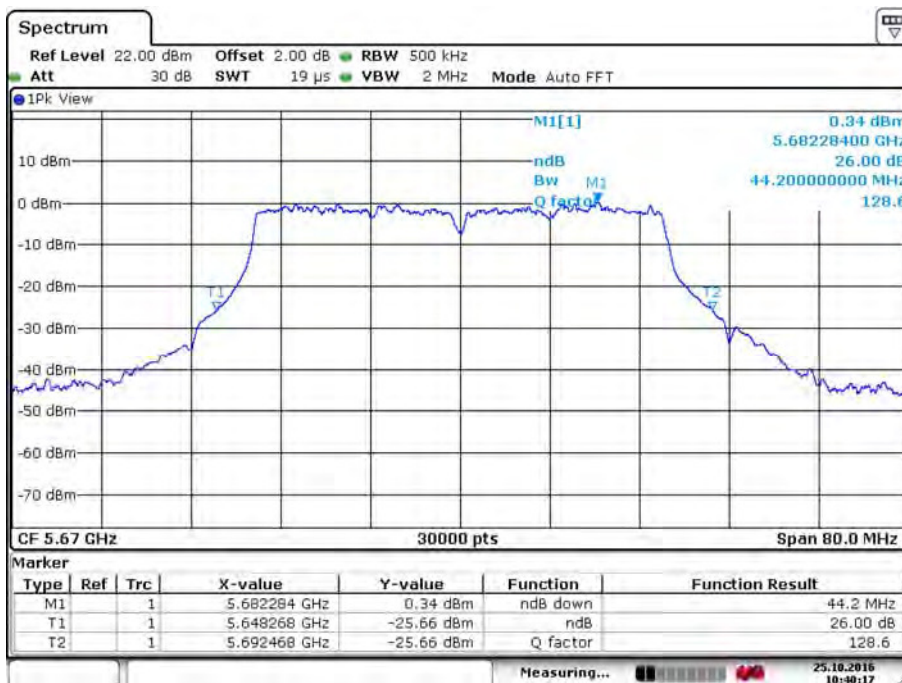


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM161000852204

Page: 105 of 544

Test mode:	802.11ac(HT40)	Frequency(MHz):	5670
------------	----------------	-----------------	------



Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5190
------------	---------------------	-----------------	------



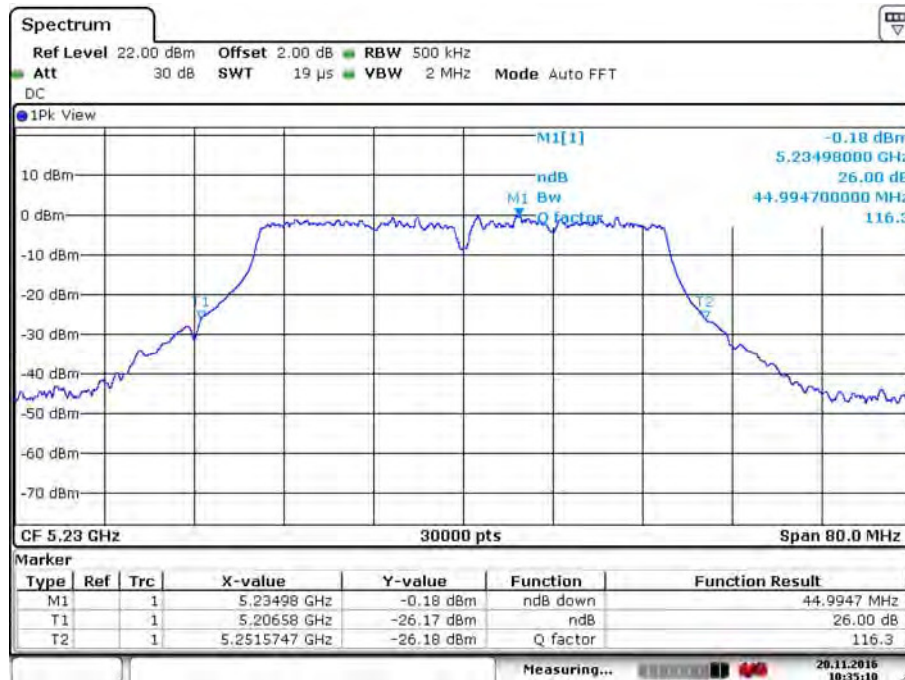


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

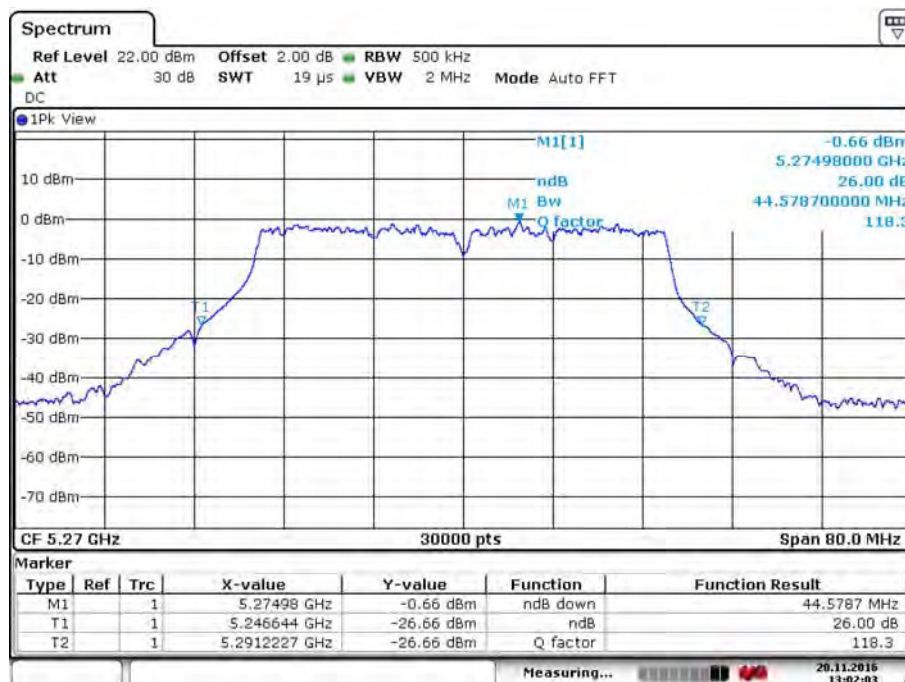
Report No.: SZEM161000852204

Page: 106 of 544

Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5230
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5270
------------	---------------------	-----------------	------



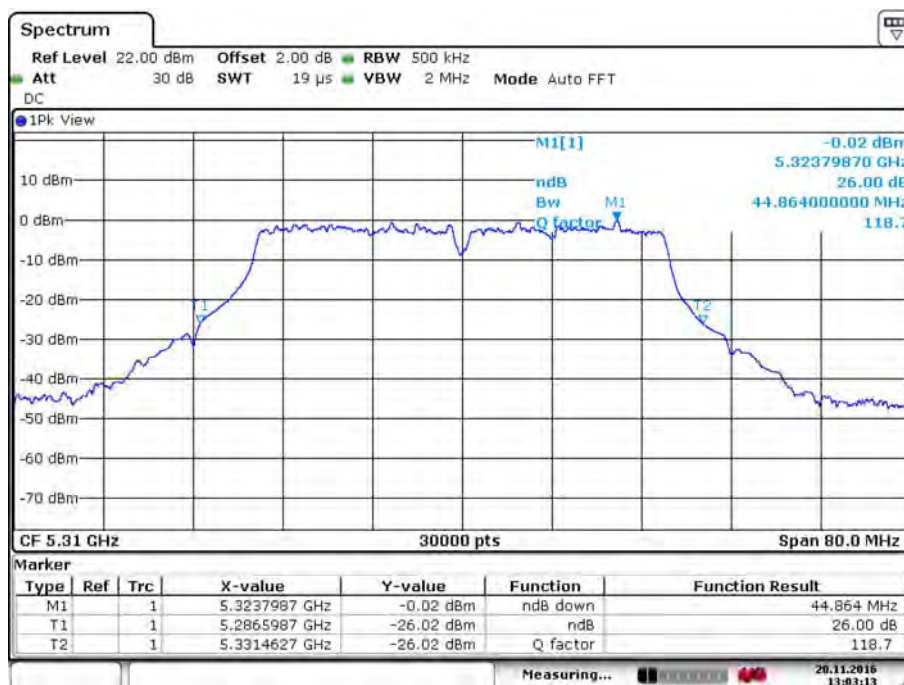


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

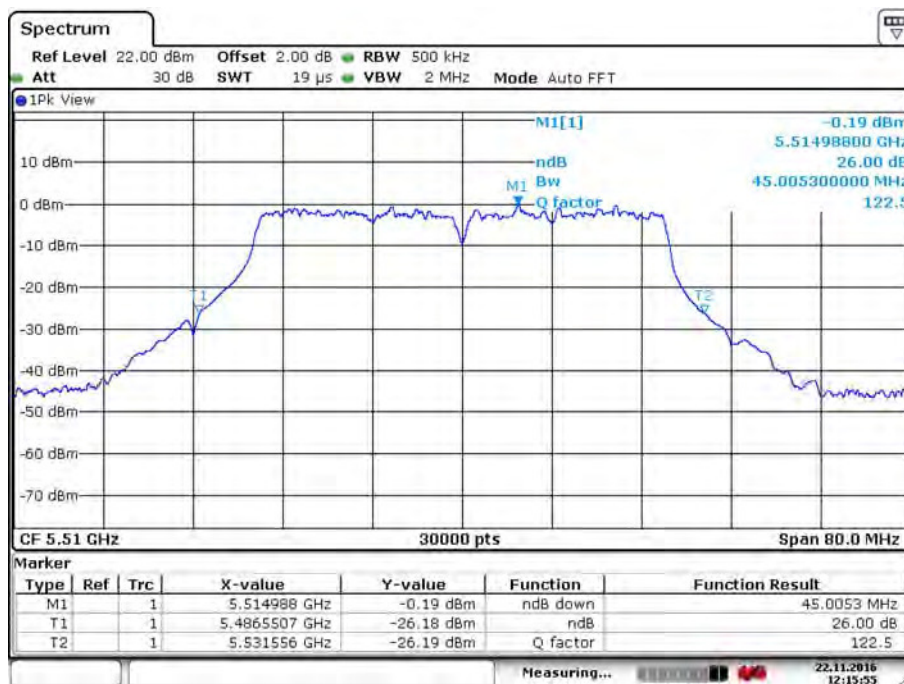
Report No.: SZEM161000852204

Page: 107 of 544

Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5310
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5510
------------	---------------------	-----------------	------



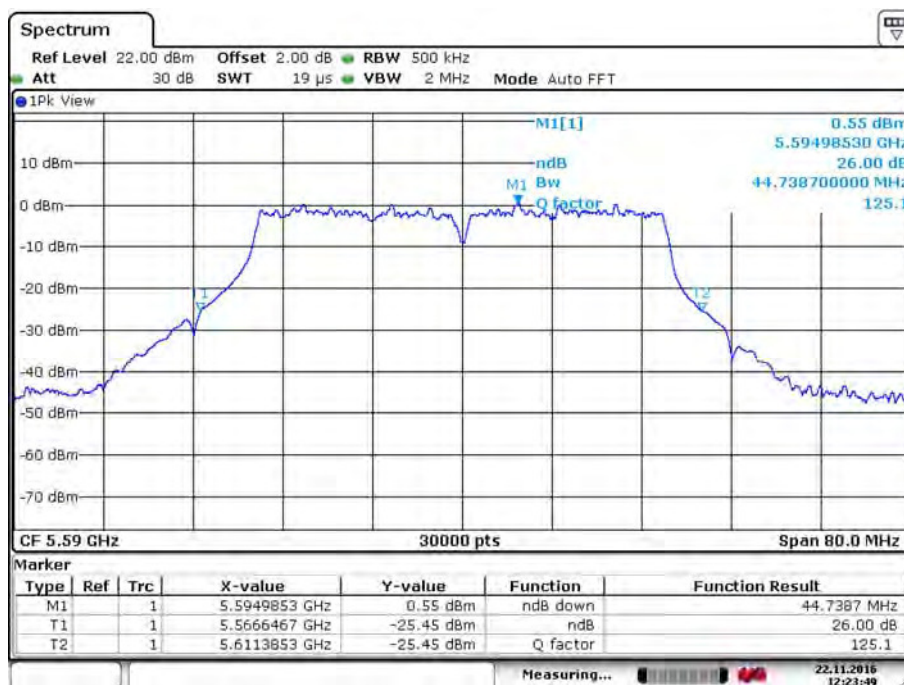


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

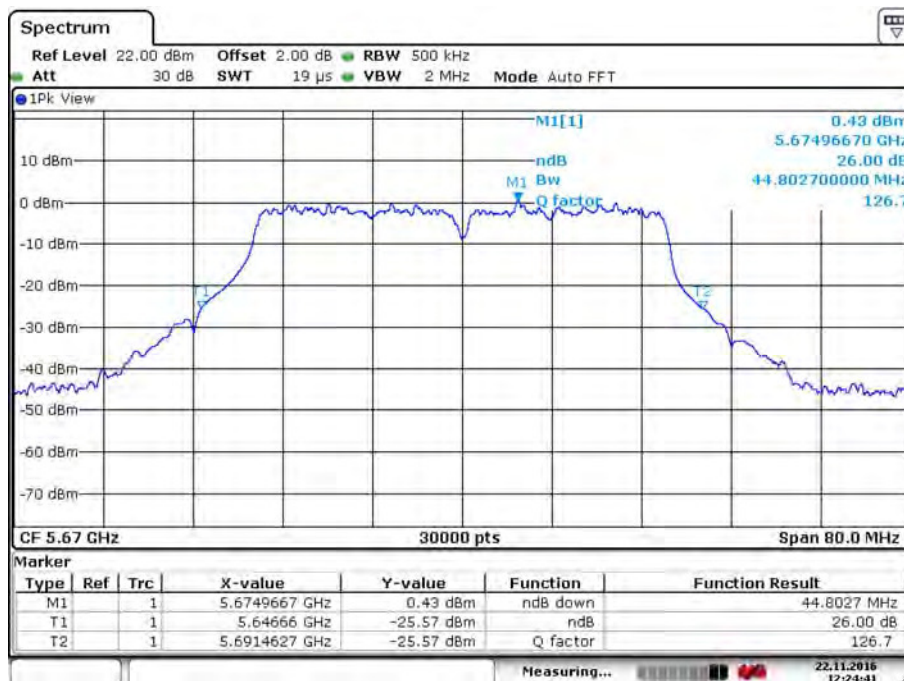
Report No.: SZEM161000852204

Page: 108 of 544

Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5590
------------	---------------------	-----------------	------



Test mode:	802.11ac(HT40) MIMO	Frequency(MHz):	5670
------------	---------------------	-----------------	------



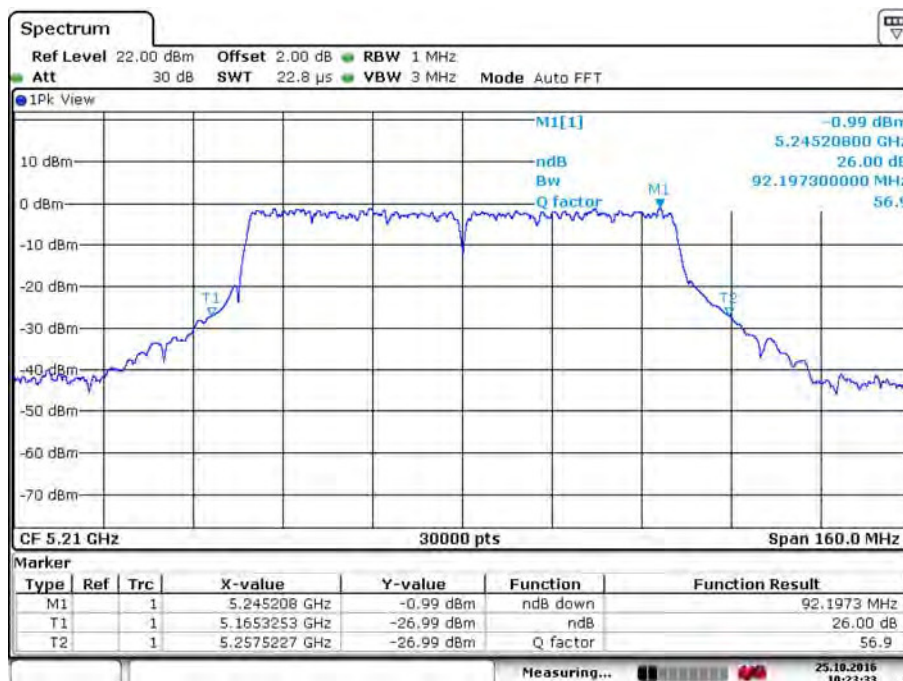


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

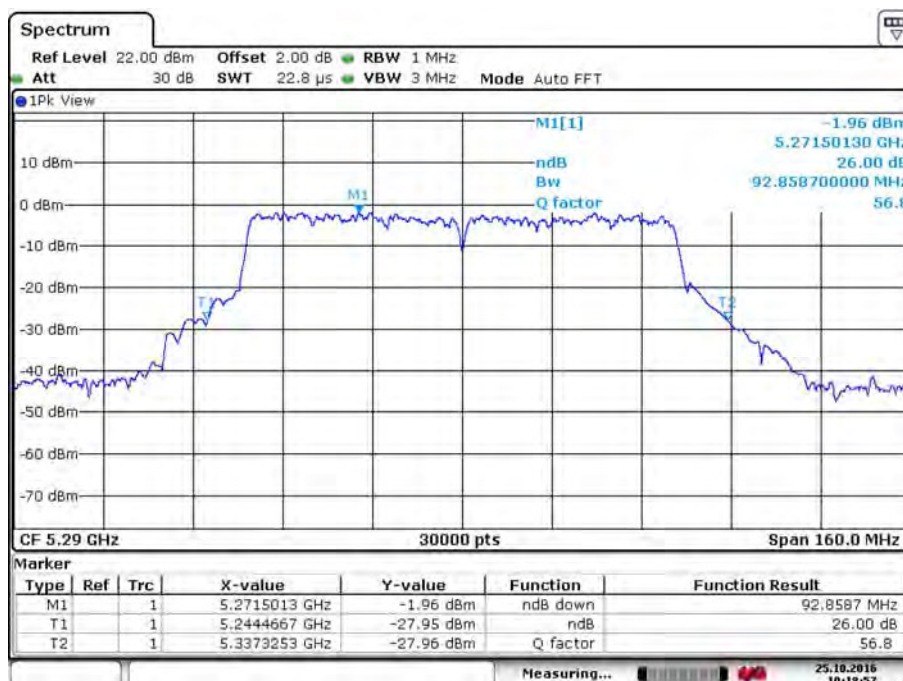
Report No.: SZEM161000852204

Page: 109 of 544

Test mode:	802.11ac(HT80)	Frequency(MHz):	5210
------------	----------------	-----------------	------



Test mode:	802.11ac(HT80)	Frequency(MHz):	5290
------------	----------------	-----------------	------



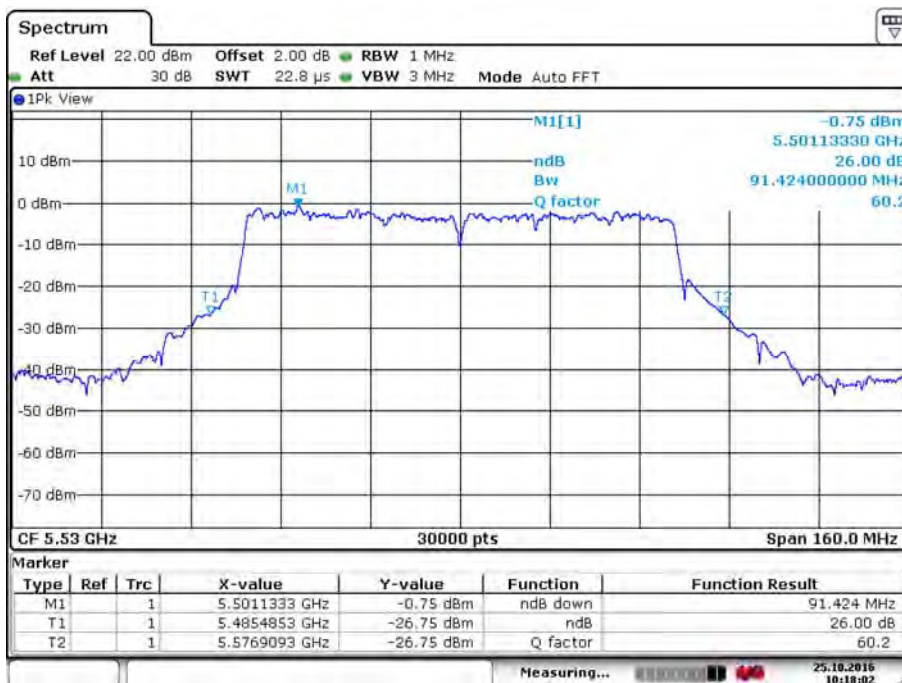


SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Report No.: SZEM161000852204

Page: 110 of 544

Test mode:	802.11ac(HT80)	Frequency(MHz):	5530
------------	----------------	-----------------	------



Test mode:	802.11ac(HT80)	Frequency(MHz):	5610
------------	----------------	-----------------	------

