

**Radio equipment according to Certification
Ordinance Article 2 paragraph 1 item (8)
for
Call Bell System Transmitter
Model No.: RZ-1TC1**

of

**Applicant: SHARP CORPORATION
Address: 492 Minosho-cho, Yamatokoriyama-shi, Nara 639-1186,
Japan**

Tested and Prepared

by

Worldwide Testing Services (Taiwan) Co., Ltd.

FCC Registration No.: TW1477, TW0020, TW1072

Industry Canada filed test laboratory Reg. No. IC 5679A-1, IC 5107A-1

A2LA Accredited No.: 2732.01



Report No.: W6R21807-18267-J-1

6F, NO. 58, LANE 188, RUEY-KUANG RD., NEIHU TAIPEI 114, TAIWAN, R.O.C.
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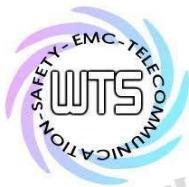
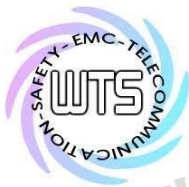


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1 General Information

1.1 Notes

The purpose of conformity testing is to increase the probability of adherence to the essential requirements or conformity specifications, as appropriate.

The complexity of the technical specifications, however, means that full and thorough testing is impractical for both technical and economic reasons.

Furthermore, there is no guarantee that a test sample, which has passed all the relevant tests conforms to a specification.

Neither is there any guarantee that such a test sample will interwork with other genuinely open systems. The existence of the tests nevertheless provides the confidence that the test sample possesses the qualities as maintained and that its performance generally conforms to representative cases of communications equipment.

The test results of this test report relate exclusively to the item tested as specified in 1.5.

The test report may only be reproduced or published in full.

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Tester:

July 31, 2018

Robert Ren

Robert Ren

Date

WTS-Lab.

Name

Signature

Technical responsibility for area of testing:

July 31, 2018

Kevin Wang

Kevin Wang

Date

WTS

Name

Signature



1.2 Testing laboratory

1.2.1 Location

OATS

No.5-1, Lishui, Shuang Sing Village,
Wanli Dist., New Taipei City 207,
Taiwan (R.O.C.)

Company

Worldwide Testing Services(Taiwan) Co., Ltd.
6F, NO. 58, LANE 188, RUEY-KUANG RD.
NEIHU, TAIPEI 114, TAIWAN R.O.C.

Tel : 886-2-66068877

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1.2.2 Details of accreditation status

Accredited testing laboratory

A2LA accredited number: 2732.01

FCC filed test laboratory Reg. No. TW1477, TW0020, TW1072

Industry Canada filed test laboratory Reg. No. IC 5679A-1, IC 5107A-1

Test location, where different from Worldwide Testing Services (Taiwan) Co., Ltd. :

Name: ./.

Accredited number: ./.

Street: ./.

Town: ./.

Country: ./.

Telephone: ./.

Fax: ./.



1.3 Details of applicant

Name: SHARP CORPORATION
Street: 492 Minosho-cho, Yamatokoriyama-shi,
City: Nara 639-1186,
Country: Japan
Telephone: +81-743-55-4188
Fax: ./.

1.4 Application details

Date of receipt of test item: ./.
Date of test: From April 18, 2018 to May 11, 2018

1.5 Equipment information

Description of test item: Call Bell System Transmitter
Type identification: RZ-1TC1
Multi-listing model number: ./.
Modulation Type: GFSK
Frequency range: 429.25MHz-429.7375MHz
Operating frequency: 429.25 MHz, 429.5MHz, 429.7375MHz
Type of Antenna: Dipole Antenna
Antenna gain of Antenna: -2.62 dBi
Rated output power: 9 mW

Manufacturer: (if different from applicant)

Name: ARCT INC.
Street: 2F-10., No.12, Ln. 609, Sec. 5, Chongxin Rd.,Sanchong Dist.,
Town: New Taipei City 241,
Country: Taiwan (R.O.C.)

1.6 Assembly

Special screws will be used for preventing access RF part directly. For this EUT is opening only by destroying the equipment have been taken to satisfy sample requirement.

1.7 Test method

According to TELEMETER, TELECONTROL AND DATA TRANSMISSION RADIO EQUIPMENT FOR SPECIFIED LOW-POWER RADIO STATION ARIB STD-T67

Special statement

1. This test report is based on the original test report no.: W6M21804-18003-J-1.
2. The relevant Circuitry, PCB Layout, Inner element, Appearance and Function is exactly the same as the one in original test report. The only difference is the antenna. Therefore the test result is also based on the original test report no. W6M21804-18003-J-1 without re-testing.

2 Technical Test

2.1 Summary of test results

No deviations from the technical specifications were ascertained in the course of the test performed.

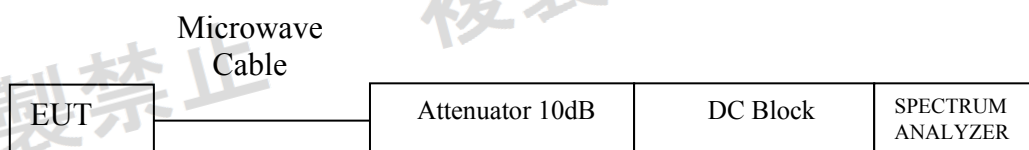
2.2 Test environment

Temperature: 25 °C
 Relative humidity content: 20 ... 75 %
 Air pressure: 860 ... 1030 hPa
 Details of power supply: Adaptor (I/P: 100-240V~ 0.7A 50/60Hz, O/P: 5V, 4.0A)
 Other parameter: ./.
 Extreme conditions parameters: ./.

2.3 Channel list

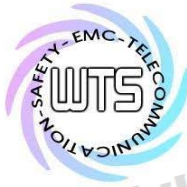
7	429.2500	27	429.5000
8	429.2625	28	429.5125
9	429.2750	29	429.5250
10	429.2875	30	429.5375
11	429.3000	31	429.5500
12	429.3125	32	429.5625
13	429.3250	33	429.5750
14	429.3375	34	429.5875
15	429.3500	35	429.6000
16	429.3625	36	429.6125
17	429.3750	37	429.6250
18	429.3875	38	429.6375
19	429.4000	39	429.6500
20	429.4125	40	429.6625
21	429.4250	41	429.6750
22	429.4375	42	429.6875
23	429.4500	43	429.7000
24	429.4625	44	429.7125
25	429.4750	45	429.7250
26	429.4875	46	429.7375

2.4 Test setup



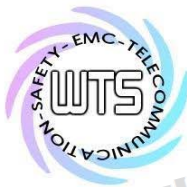
2.5 Test equipment utilized

No.	Test equipment	Type	Serial No.	Manufacturer	Cal. Date	Next Cal. Date
ETSTW-CE 001	EMI TEST RECEIVER	ESHS10	842121/013	R&S	2017/5/26	2018/5/25
ETSTW-CE 003	AC POWER SOURCE	APS-9102	D161137	GW	Function Test	
ETSTW-CE 004	ZWEILEITER-V-NETZNACHBILDUNG TWO-LINE V-NETWORK	ESH3-Z5	840731/011	R&S	2017/10/26	2018/10/25
ETSTW-CE 005	Line-Impedance Stabilisation Network	NNBM 8126D	137	Schwarzbeck	2018/3/23	2019/3/22
ETSTW-CE 006	IMPULSBEGRENZER PULSE LIMITER	ESH3-Z2	100226	R&S	2017/8/22	2018/8/21
ETSTW-CE 008	HF-EICHLERUNG RF STEP ATTENUATOR 139dB DPSP	334.6010.02	844581/024	R&S	Function Test	
ETSTW-CE 009	TEMP.&HUMIDITY CHAMBER	GTH-225-40-1P-U	MAA0305-009	GIANT FORCE	2017/7/14	2018/7/13
ETSTW-CE 013	CISPR 22 TWO BALANCED TELECOM PAIRS IMPEDANCE STABILIZATION NETWORK	FCC-TLISN-T4-02	20242	FCC	2017/9/1	2018/8/31
ETSTW-CE 016	TWO-LINE V-NETWORK	ENV216	100050	R&S	2017/8/31	2018/8/30
ETSTW-CE 024	IMPEDANCE STABILIZATION NETWORK	ISN T800	29454	TESEQ	2017/6/19	2018/6/18
ETSTW-CE 027	COUPLING AND DECOUPLING NETWORK	CDN ST08AS	38087	TESEQ	Function Test	
ETSTW-CE 028	MXE EMI Receiver	N9038A	MY53220110	Agilent	2017/7/11	2018/7/10
ETSTW-CE 030	CISPR Passive probe	PMM SHC-1-1000	1021X30803	Narda S.T.S/PMM	2018/3/9	2019/3/8
ETSTW-CS 004	COUPLING AND DECOUPLING NETWORK	CDN M016	20053	SCHAFFNER	2017/8/7	2018/8/6
ETSTW-CS 005	RF Power Amplifier	100A250A	306547	AR	Function Test	
ETSTW-CS 010	6 dB Attenuator	SA3N1007-06	None	AISI	Function test	
ETSTW-CS 011	ESG Analog Signal Generator	E4428C	MY45280875	AGILENT	2017/7/11	2018/7/10
ETSTW-RE 003	EMI TEST RECEIVER	ESI 26	831438/001	R&S	2017/5/26	2018/5/25
ETSTW-RE 004	EMI TEST RECEIVER	ESI 40	832427/004	R&S	2018/5/9	2019/5/8
ETSTW-RE 005	EMI TEST RECEIVER	ESVS10	843207/020	R&S	2017/8/25	2018/8/24
ETSTW-RE 010	ABSORBING CLAMP	MDS 21	03469	Schwarzbeck	2017/9/18	2018/9/17
ETSTW-RE 012	TUNABLE BANDREJECT FILTER	D.C 0309	146	K&L	Function Test	
ETSTW-RE 013	TUNABLE BANDREJECT FILTER	D.C 0336	397	K&L	Function Test	
ETSTW-RE 019	MICROWAVE HORN ANTENNA	22240-25	121074	FM	2018/4/19	2019/4/18
ETSTW-RE 020	MICROWAVE HORN ANTENNA	AT4002A	306915	AR	Function Test	
ETSTW-RE 027	Passive Loop Antenna	6512	00034563	ETS-Lindgren	2017/7/3	2018/7/2
ETSTW-RE 028	Log-Periodic Dipole Array Antenna	3148	34429	ETS-Lindgren	Function Test	
ETSTW-RE 029	Biconical Antenna	3109	33524	ETS-Lindgren	Function Test	
ETSTW-RE 030	Double-Ridged Guide Horn Antenna	3117	00035224	ETS-Lindgren	2018/3/26	2019/3/25
ETSTW-RE 032	Millivoltmeter	URV 55	849086/013	R&S	2017/9/8	2018/9/7



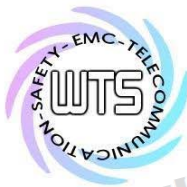
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ETSTW-RE 033	WaveRunner 6000A Serie Oscilloscope	WAVERUNNER 6100A	LCRY0604P14508	LeCroy	2017/7/17	2018/7/16
ETSTW-RE 034	Power Sensor	URV5-Z4	839313/006	R&S	2017/9/8	2018/9/7
ETSTW-RE 042	Biconical Antenna	HK116	100172	R&S	2018/1/23	2019/1/22
ETSTW-RE 043	Log-Periodic Dipole Antenna	HL223	100166	R&S	2018/4/13	2019/4/12
ETSTW-RE 044	Log-Periodic Antenna	HL050	100094	R&S	2018/4/26	2019/4/25
ETSTW-RE 045	ESA-E SERIES SPECTRUM ANALYZER	E4404B	MY45111242	Agilent	Pre-test Use	
ETSTW-RE 048	Triple Loop Antenna	HXYZ 9170	HXYZ 9170-134	Schwarzbeck	2017/12/14	2018/12/13
ETSTW-RE 050	Attenuator 10dB	50HF-010-1	None	JFW	2018/3/1	2019/2/28
ETSTW-RE 051	Attenuator 6dB	50HF-006-1	None	JFW	2018/3/1	2019/2/28
ETSTW-RE 053	Attenuator 3dB	50HF-003-1	None	JFW	2018/3/1	2019/2/28
ETSTW-RE 055	SPECTRUM ANALYZER	FSU 26	200074	R&S	2018/3/6	2019/3/5
ETSTW-RE 060	Attenuator 30dB	5015-30	F651012z-01	ATM	2018/3/1	2019/2/28
ETSTW-RE 061	Amplifier Module	CHC 1	None	ETS	2018/5/9	2019/5/8
ETSTW-RE 062	Amplifier Module	CHC 2	None	KMIC	2018/3/30	2019/3/29
ETSTW-RE 064	Bluetooth Test Set	MT8852B-042	6K00005709	Anritsu	Function Test	
ETSTW-RE 065	Amplifier	AMF-6F-18002650-25-10P	941608	MITEQ	2018/3/21	2019/3/20
ETSTW-RE 069	Double-Ridged Guide Horn Antenna	3117	00069377	ETS-Lindgren	Function Test	
ETSTW-RE 072	CELL SITE TEST SET	8921A	3339A00375	HP	2017/9/11	2018/9/10
ETSTW-RE 073	Power Meter	N1911A	MY45100769	Agilent	2018/1/22	2019/1/21
ETSTW-RE 074	Power Sensor	N1921A	MY45241198	Agilent	2018/1/22	2019/1/21
ETSTW-RE 091	Match Pad	MDCS1500	None	WOKEN	2018/4/16	2019/4/15
ETSTW-RE 099	DC Block	50DB-007-1	None	JFW	2018/2/23	2019/2/22
ETSTW-RE 112	AC POWER SOURCE	TFC-1005	T-0A023536	T-Power	Function test	
ETSTW-RE 115	2.4GHz Notch Filter	N0124411	473874	MICROWAVE CIRCUITS	2018/1/15	2019/1/14
ETSTW-RE 120	RF Player	MP9200	MP9210-111022	ADIVIC	Function test	
ETSTW-RE 122	SIGNAL GENERATOR	SMF100A	102149	R&S	2017/5/26	2018/5/25
ETSTW-RE 125	5GHz Notch filter	5NSL11-5200/E221.3-O/O	1	K&L Microwave	2017/8/9	2018/8/8
ETSTW-RE 126	5GHz Notch filter	5NSL12-5800/E221.3-O/O	1	K&L Microwave	2017/8/9	2018/8/8
ETSTW-RE 127	RF Switch Box	RFS-01	None	WTS	2018/2/27	2019/2/26
ETSTW-RE 128	5.3GHz Notch filter	N0153001	SN487233	Microwave Circuits	2017/8/9	2018/8/8
ETSTW-RE 129	5.5GHz Notch filter	N0555984	SN487234	Microwave Circuits	2017/8/9	2018/8/8
ETSTW-RE 130	Handheld RF Spectrum Analyzer	N9340A	CN0147000204	Agilent	Pre-test Use	
ETSTW-RE 133	EXA Signal Analyzer	N9010A	MY53470566	Agilent	2018/4/20	2019/4/19
ETSTW-RE 134	MXG Vector Signal Generator	N5182B	MY53050664	Agilent	2018/4/19	2019/4/18
ETSTW-RE 135	EXG Analog Signal Generator	N5171B	MY53050476	Agilent	2018/4/19	2019/4/18
ETSTW-RE 136	USB Wideband Power Sensor	U2021XA	MY54070006	Agilent	2018/4/24	2019/4/23



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ETSTW-RE 137	USB Wideband Power Sensor	U2021XA	MY54020004	Agilent	2018/4/24	2019/4/23
ETSTW-RE 138	USB Wideband Power Sensor	U2021XA	MY54110003	Agilent	2018/4/24	2019/4/23
ETSTW-RE 139	USB Wideband Power Sensor	U2021XA	MY54110004	Agilent	2018/4/24	2019/4/23
ETSTW-RE 140	Simultaneous sampling DAQ	U2531A	TW56143501	Agilent	Function Test	
ETSTW-RE 142	Amplifier	8447D	2805A03378	Agilent	2018/3/30	2019/3/29
ETSTW-RE 146	Preamplifier	JPA-10M1G	15090004	JPT	2018/2/21	2019/2/20
ETSTW-RE 147	Bi-log Hybrid Antenna	MCTD 2786B	BLB16M04005	ETC	2018/3/23	2019/3/22
ETSTW-RE 148	Bi-log Hybrid Antenna	MCTD 2786B	BLB16M04006	ETC	2017/5/19	2018/5/18
ETSTW-RE 149	Blocking Test System	AD211	TW5451133	Keysight	Function Test	
ETSTW-RE 150	Blocking Test System	AD211	TW5451133	Keysight	Function Test	
ETSTW-RE 151	Thermohygrometer	608-h1	45104376	TESTO	2017/8/30	2018/8/29
ETSTW-EMI 001	HARMONICS 1000	HAR1000-1P	093	EMC-PARTNER	2018/2/6	2019/2/5
ETSTW-EMI 010	AC Power Source	PS3	0219	EMC PARTNER	2018/2/7	2019/2/6
ETSTW-EMI 011	USB Compact Modulator	SFC-U	101689	R&S	2018/5/9	2019/5/8
ETSTW-EMS 001	BASELSTRASSE 160 CH-4242 LAUFEN	CN-EFT1000	354	EMC-PARTNER	Function Test	
ETSTW-EMS 002	Frequency Converter	YF-6020	0308014	None	Function Test	
ETSTW-EMS 003	EMC Immunity Test System	TRA2000IN6	579	EMC-PARTNER	2017/8/31	2018/8/30
ETSTW-EMS 009	Magnetic Field Antenna	MF1000-1	104	EMC-PARTNER	Function Test	
ETSTW-EMS 010	Coupling De-coupling Network	CDN-UTP8	014	EMC-PARTNER	Function Test	
ETSTW-EMS 012	EM Injection Clamp	F-2031-23MM	476	FCC	2017/6/20	2018/6/19
ETSTW-EMS 016	EMF Tester	1390	071208732	TES	2017/8/28	2018/8/27
ETSTW-EMS 017	Multimeter	DM-1220	518614	HILA	2017/8/18	2018/8/17
ETSTW-EMS 019	Electrostatic Discharge Simulator	ESS-2002	ESS06Y6300	NoiseKen	2017/9/13	2018/9/12
ETSTW-EMS 022	Transient Test System	TRANSIENT -3000 S	1303	EMC-PARTNER	2017/8/28	2018/8/27
ETSTW-EMS 023	Electrostatic Discharge Simulator	NSG 435	6984	TESEQ	2017/6/16	2018/6/15
ETSTW-EMS 024	Humidity Temperature Meter	TES-1260	160304437	TES	2017/8/18	2018/8/17
ETSTW-EMS 025	10/700 Surge Generator	SG-728G	EC0631106	3Ctest	2017/8/30	2018/8/29
ETSTW-RS 003	RF Power Amplifier	30S1G3	306933	AR	Function Test	
ETSTW-RS 007	14" COLOR VIDEO MONITOR	HS-CM145A	0512011548	None	Function Test	
ETSTW-RS 009	SIGNAL GENERATOR	8648C	3642U01656	HP	2018/1/18	2019/1/17
ETSTW-RS 010	Broadband Field Meter	NBM-520	C-0195	Narda	2017/11/8	2018/11/7
ETSTW-RS 011	RF Power Amplifier	150W1000	0464490	AR	Function Test	
ETSTW-RS 012	Log-Periodic Antenna	ATL80M1G	0348244	AR	Function Test	
ETSTW-RS 013	Stacked Log Periodic Antenna	STLP9149	473	RS	Function Test	
ETSTW-RS 014	Power Amplifier	AS0860B	1078553	MILMEGA	Function Test	
ETSTW-RS 015	SIGNAL GENERATOR	ITS6006B	37669	TESEQ	2018/3/16	2019/3/15
ETSTW-RS 016	Power sensor	PMR6006	75617	TESEQ	2018/3/16	2019/3/15



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ETSTW-RS 017	Power sensor	PMR6006	75618	TESEQ	2018/3/16	2019/3/15
ETSTW-GSM 002	Universal Radio Communication Tester	CMU 200	109439	R&S	2018/2/27	2019/2/26
ETSTW-GSM 003	Radio Communication Analyzer	MT8820C	6201342073	Anritsu	2018/3/2	2019/3/1
ETSTW-GSM 004	Wideband Radio Communication Tester	CMW500	128092	R&S	2017/10/16	2018/10/15
ETSTW-GSM 019	Band Reject Filter	WRCTF824/849-822/851-40/12+9SS	3	WI	2018/1/15	2019/1/14
ETSTW-GSM 020	Band Reject Filter	WRCD1747/1748-1743/1752-32/5SS	1	WI	2018/1/15	2019/1/14
ETSTW-GSM 021	Band Reject Filter	WRCD1879.5/1880.5-1875.5/1884.5-32/5SS	3	WI	2018/1/15	2019/1/14
ETSTW-GSM 022	Band Reject Filter	WRCT901.9/903.1-904.25-50/8SS	1	WI	2018/1/15	2019/1/14
ETSTW-GSM 023	Power Divider	4901.19.A	None	SUHNER	2017/9/13	2018/9/12
ETSTW-GSM 024	Radio Communication Analyzer	MT8821C	None	Anritsu	2018/3/7	2019/3/6
ETSTW-Cable 002	Microwave Cable	SUCOFLEX 104 (S Cable 7)	238093	HUBER+SUHNER	2018/5/9	2019/5/8
ETSTW-Cable 003	Microwave Cable	SUCOFLEX 104 (S Cable 11)	209953	HUBER+SUHNER	2018/5/9	2019/5/8
ETSTW-Cable 063	N type Cable (5m)	RG214/U	1249271	HUBER+SUHNER	Function Test	
ETSTW-Cable 016	BNC Cable	Switch Box	B Cable 1	Schwarz beck	2018/2/22	2019/2/21
ETSTW-Cable 017	BNC Cable	X Cable	B Cable 2	Schwarz beck	2018/2/22	2019/2/21
ETSTW-Cable 018	BNC Cable	Y Cable	B Cable 3	Schwarz beck	2018/2/22	2019/2/21
ETSTW-Cable 019	BNC Cable	Z Cable	B Cable 4	Schwarz beck	2018/2/22	2019/2/21
ETSTW-Cable 020	N TYPE Cable	OATS Cable 1	N30N30-L335-15M	JYE BAO CO.,LTD.	2017/7/3	2018/7/2
ETSTW-Cable 023	BNC Cable	BNC Cable 3	None	JYE BAO CO.,LTD.	Function Test	
ETSTW-Cable 024	BNC Cable	BNC Cable 4	None	JYE BAO CO.,LTD.	Function Test	
ETSTW-Cable 025	BNC Cable	BNC Cable 5	None	JYE BAO CO.,LTD.	Function Test	
ETSTW-Cable 026	Microwave Cable	SUCOFLEX 104	279075	HUBER+SUHNER	2018/2/27	2019/2/26
ETSTW-Cable 027	Microwave Cable	SUCOFLEX 104	279083	HUBER+SUHNER	2018/5/9	2019/5/8
ETSTW-Cable 030	Microwave Cable	SUCOFLEX 104 (S Cable 9)	279067	HUBER+SUHNER	2018/2/27	2019/2/26
ETSTW-Cable 031	Microwave Cable	SUCOFLEX 104 (S Cable 10)	238092	HUBER+SUHNER	2018/3/30	2019/3/29
ETSTW-Cable 039	Microwave Cable	SUCOFLEX 104	316739	HUBER+SUHNER	2018/5/9	2019/5/8
ETSTW-Cable 042	Microwave Cable	SUCOFLEX 104 (S Cable 22)	279847	HUBER+SUHNER	Function Test	
ETSTW-Cable 043	Microwave Cable	SUCOFLEX 104	317576	HUBER+SUHNER	2018/3/30	2019/3/29
ETSTW-Cable 048	Microwave Cable	SUCOFLEX 104	325519	HUBER+SUHNER	2018/3/30	2019/3/29
ETSTW-Cable 051	BNC Cable	BNC Cable 6	None	JYE BAO CO.,LTD.	2018/3/7	2019/3/6
ETSTW-Cable 052	BNC Cable	Clamp Cable	None	Schwarz beck	2018/3/7	2019/3/6
ETSTW-Cable 058	Microwave Cable	SUCOFLEX 104	none	HUBER+SUHNER	2018/2/21	2019/2/20
ETSTW-Cable 065	N type Cable (5m)	RG214	None	DRAKA	Function Test	
ETSTW-Cable 066	SMA type cable	32022	None	ASTROLAB	2017/8/31	2018/8/30



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ETSTW-Cable 067	BNC Cable (1m)	RG213	None	ALLTESTEK	Function Test	
ETSTW-Cable 071	N TYPE CABLE	EMCCFD400-NM-NM-25000	170239	EMCI	2018/2/21	2019/2/20
WTSTW-SW 001	EMI TEST SOFTWARE	Harmonics-1000	None	EMC PARTNER	HARCS Version 4.20 Firmware Version 2.20	
WTSTW-SW 002	EMI TEST SOFTWARE	EZ EMC	None	Farad	Version ETS-03A1	
WTSTW-SW 003	EMS TEST SOFTWARE	i2	None	AUDIX	Version 3.2007-8-17b	
WTSTW-SW 005	GSM Fading Level Correction	GSMFadLevCor	None	R&S	Version 1.66	
WTSTW-SW 006	EMI TEST SOFTWARE	e3	None	AUDIX	Version 9.161014	
WTSTW-SW 007	Keysight.EN300328.V191.Test	Keysight	None	Keysight	Version 1.0.0.0	
WTSTW-SW 008	Signal studio	Agilent	None	AUDIX	Version 2.0.0.1	

3 Test results (enclosure)

3.1 Antenna specifications



Antenna Type: Dipole Antenna

Antenna Gain: -2.62 dBi

3.2 Frequency Tolerance

Tolerance from nominal frequency:

Frequency(MHz)	Voltage(Va.c.)	Result(MHz)	Error(ppm)	Limit(ppm)
429.25	Vnormal = 100V	429.250336538	0.784	4
	Vmin = 90V	429.250336538	0.784	
	Vmax = 110V	429.250336538	0.784	
429.5	Vnormal = 100V	429.500384615	0.783	
	Vmin = 90V	429.500336538	0.783	
	Vmax = 110V	429.500384615	0.783	
429.7375	Vnormal = 100V	429.737836538	0.783	
	Vmin = 90V	429.737836538	0.783	
	Vmax = 110V	429.737836538	0.783	

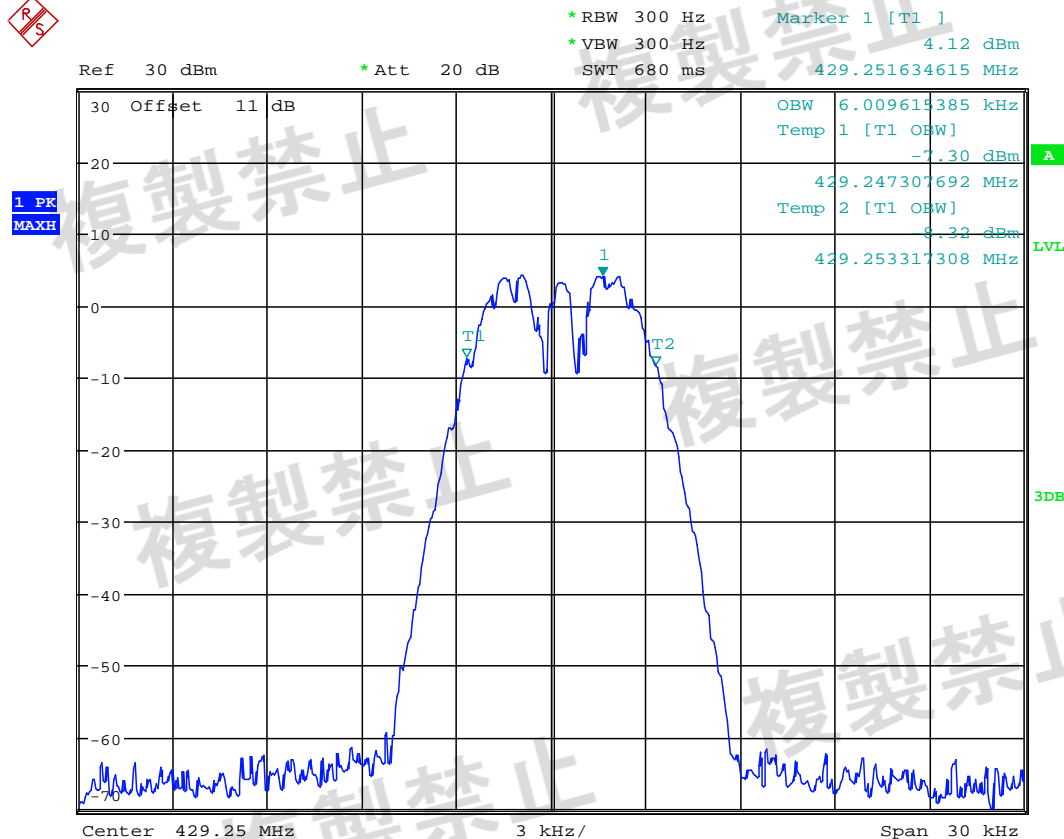
Measurement uncertainty: ± 6.09 Hz

Test equipment used: ETSTW-RE 050, ETSTW-RE 055

Limits:

Under all test conditions	4×10^{-6}
---------------------------	--------------------

3.3 Occupied Bandwidth (99% channel power bandwidth)



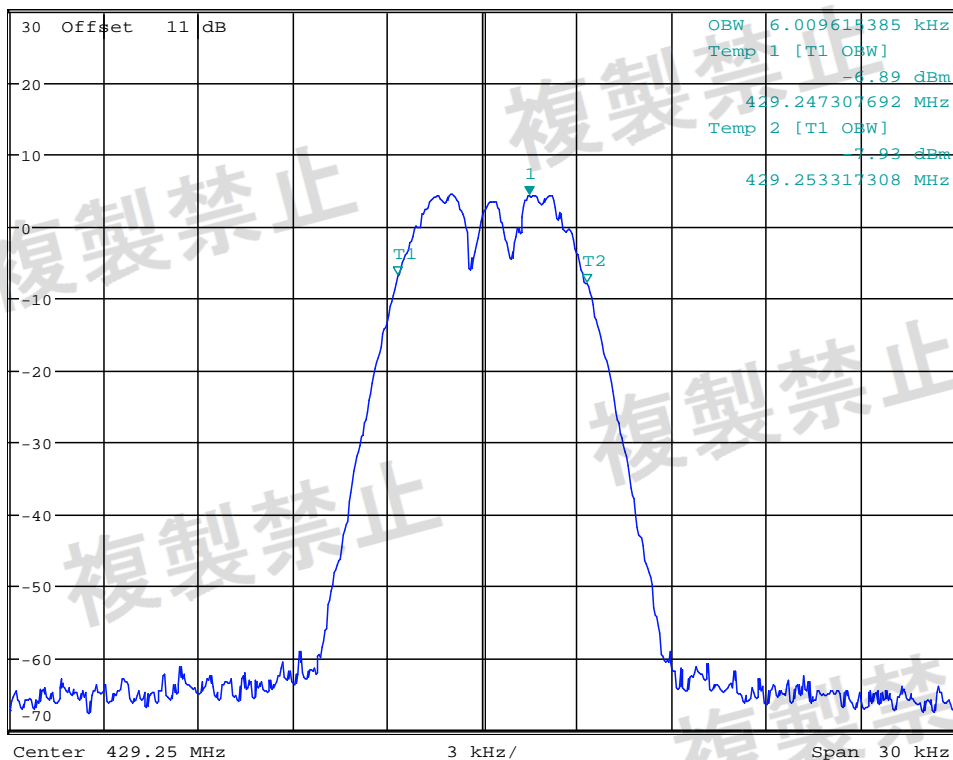
Occupied Bandwidth 100V

Date: 9.MAY.2018 17:11:23



1 PK
MAXH

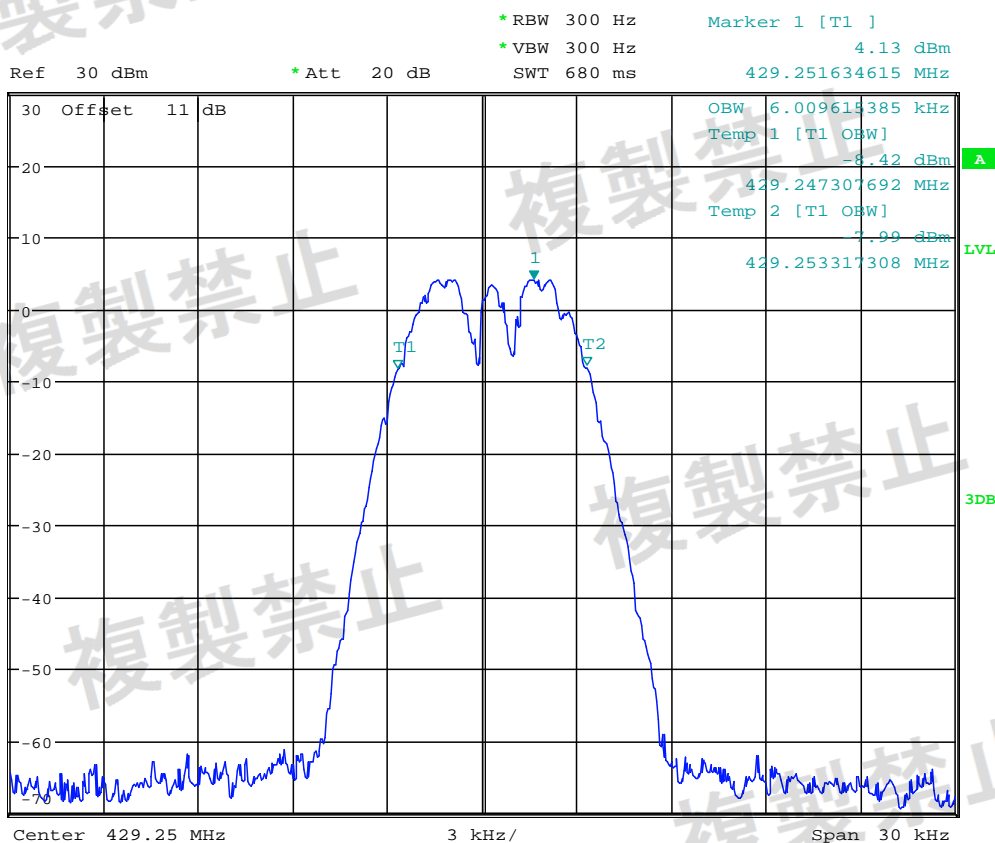
Ref 30 dBm * Att 20 dB RBW 300 Hz VBW 300 Hz SWT 680 ms Marker 1 [T1] 4.27 dBm 429.251490385 MHz



Occupied Bandwidth 90V
Date: 9.MAY.2018 17:10:58

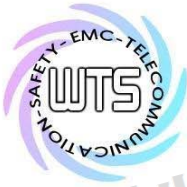


1 PK
MAXH



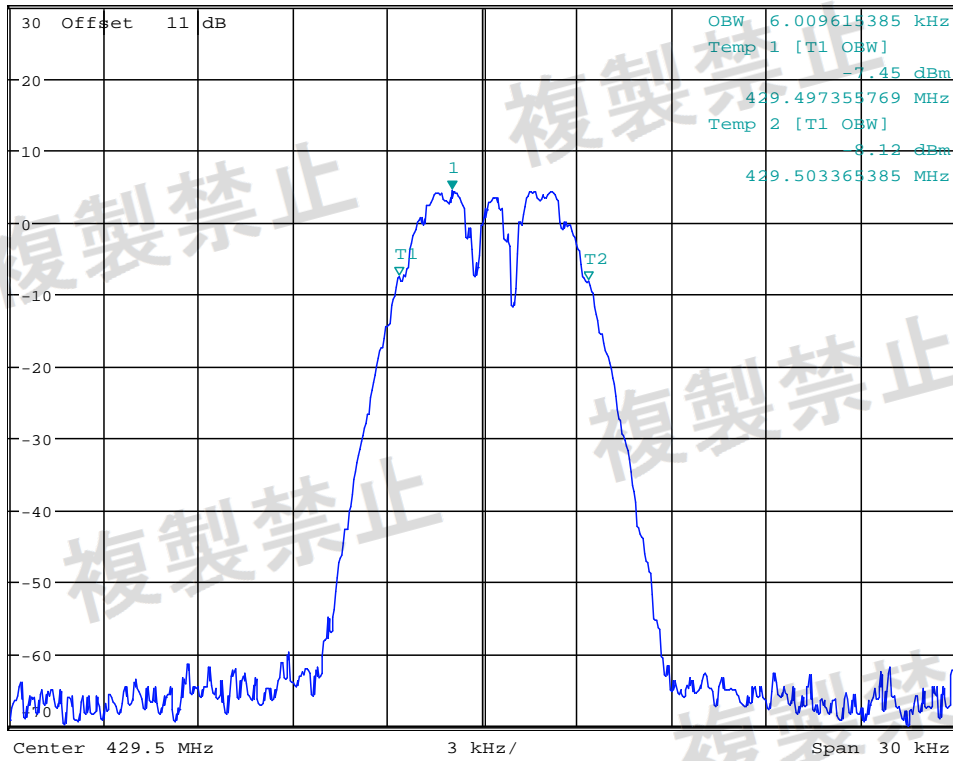
Occupied Bandwidth 110V

Date: 9.MAY.2018 17:11:51

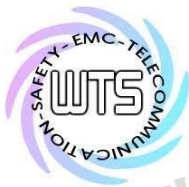


1 PK
MAXH

Ref 30 dBm * Att 20 dB * RBW 300 Hz * VBW 300 Hz SWT 680 ms Marker 1 [T1] 4.40 dBm 429.499038462 MHz

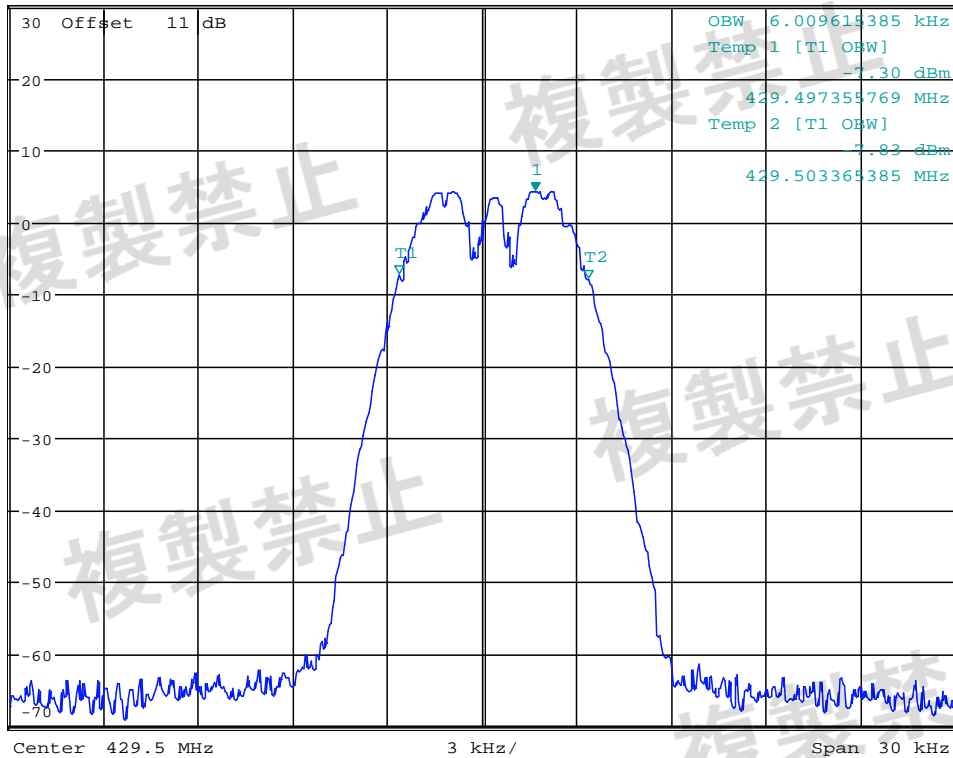


Occupied Bandwidth 100V
Date: 9.MAY.2018 17:04:35



1 PK
MAXH

Ref 30 dBm * Att 20 dB * RBW 300 Hz * VBW 300 Hz SWT 680 ms Marker 1 [T1] 4.30 dBm 429.501682692 MHz

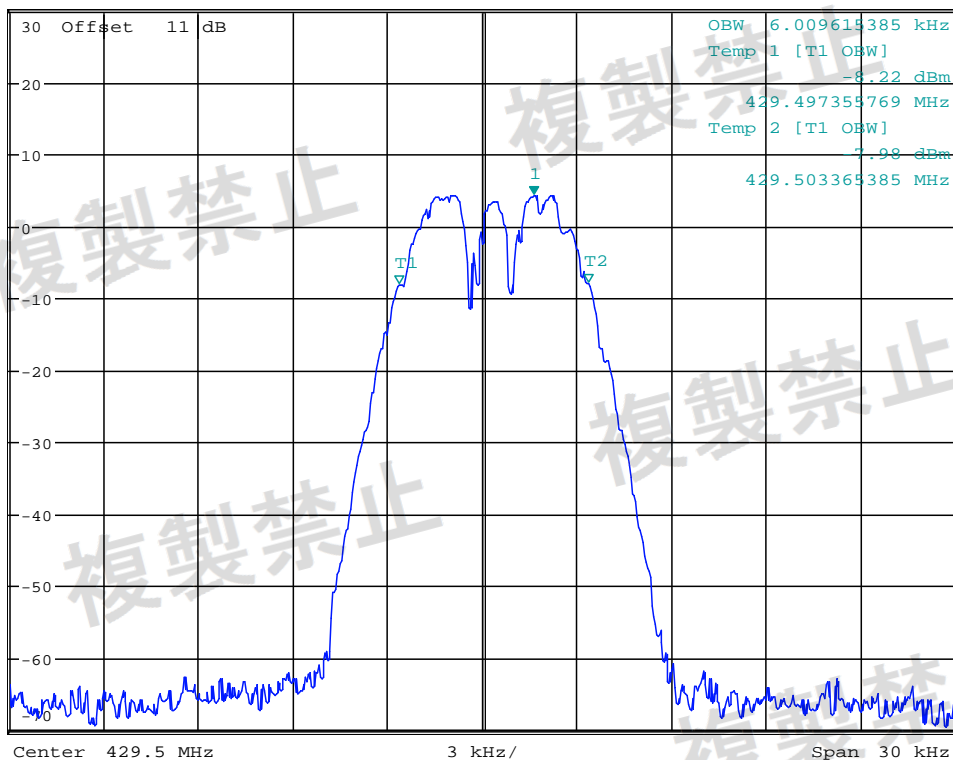


Occupied Bandwidth 90V
Date: 9.MAY.2018 17:05:04



1 PK
MAXH

Ref 30 dBm * Att 20 dB * RBW 300 Hz * VBW 300 Hz SWT 680 ms Marker 1 [T1] 4.30 dBm 429.501634615 MHz



Occupied Bandwidth 110V

Date: 9.MAY.2018 17:04:15

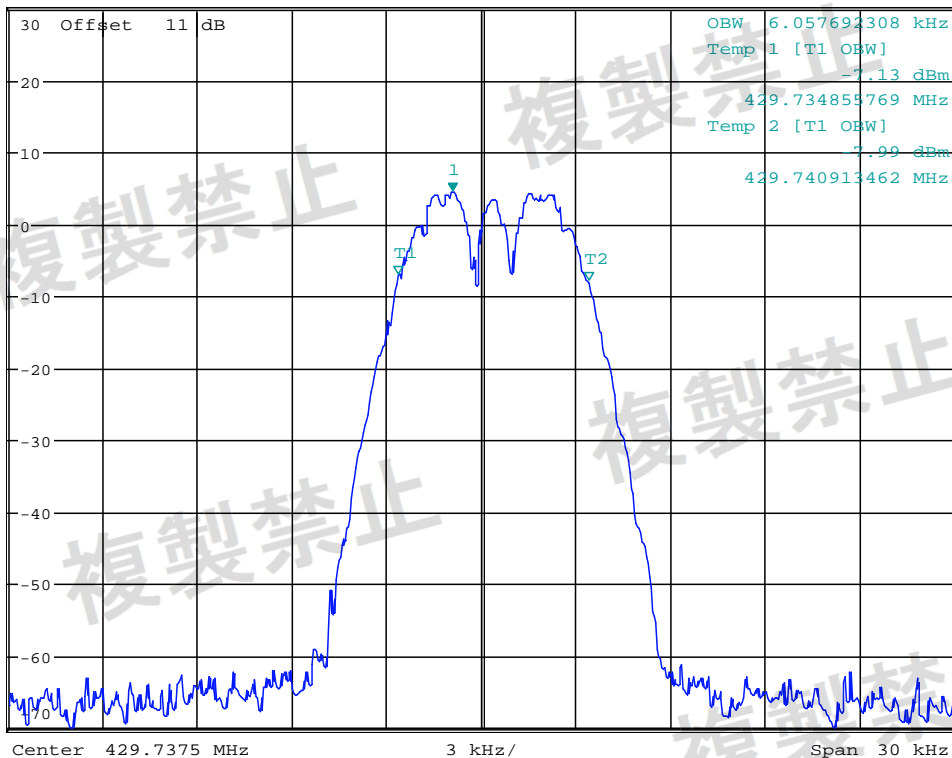


* RBW 300 Hz Marker 1 [T1]
* VBW 300 Hz 4.46 dBm
SWT 680 ms 429.736586538 MHz

Ref 30 dBm

* Att 20 dB

1 PK
MAXH

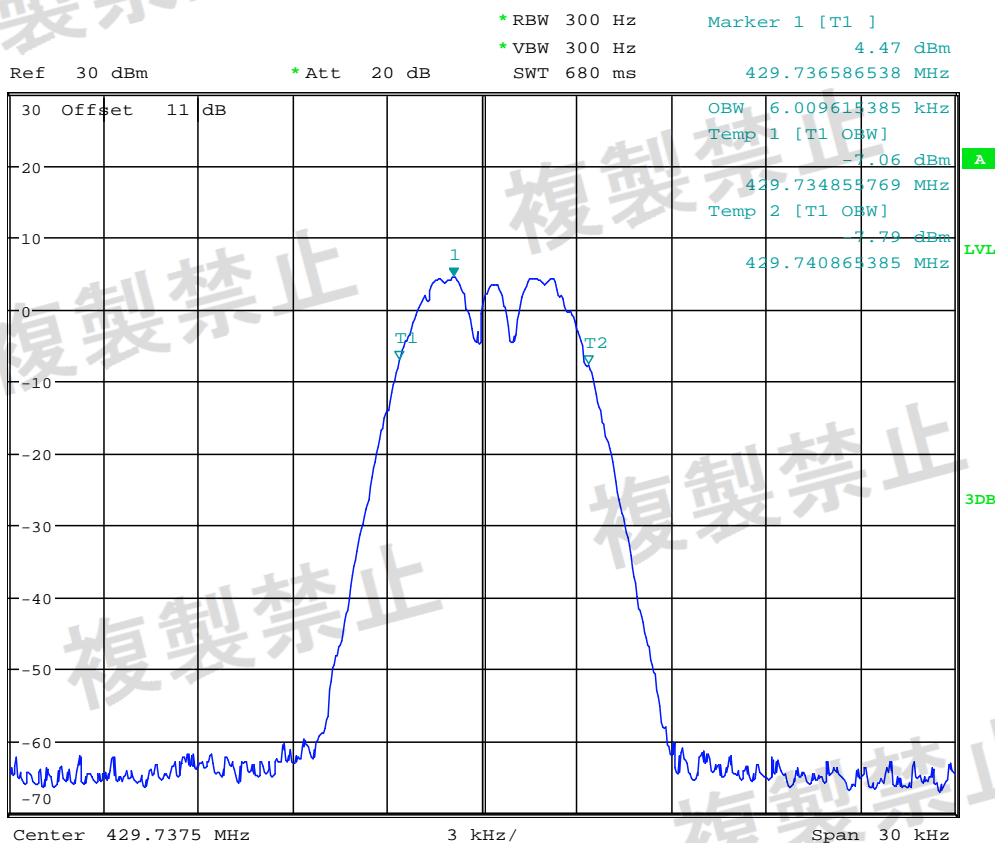


Occupied Bandwidth 100V

Date: 9.MAY.2018 17:02:58

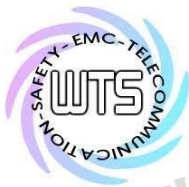


1 PK
MAXH

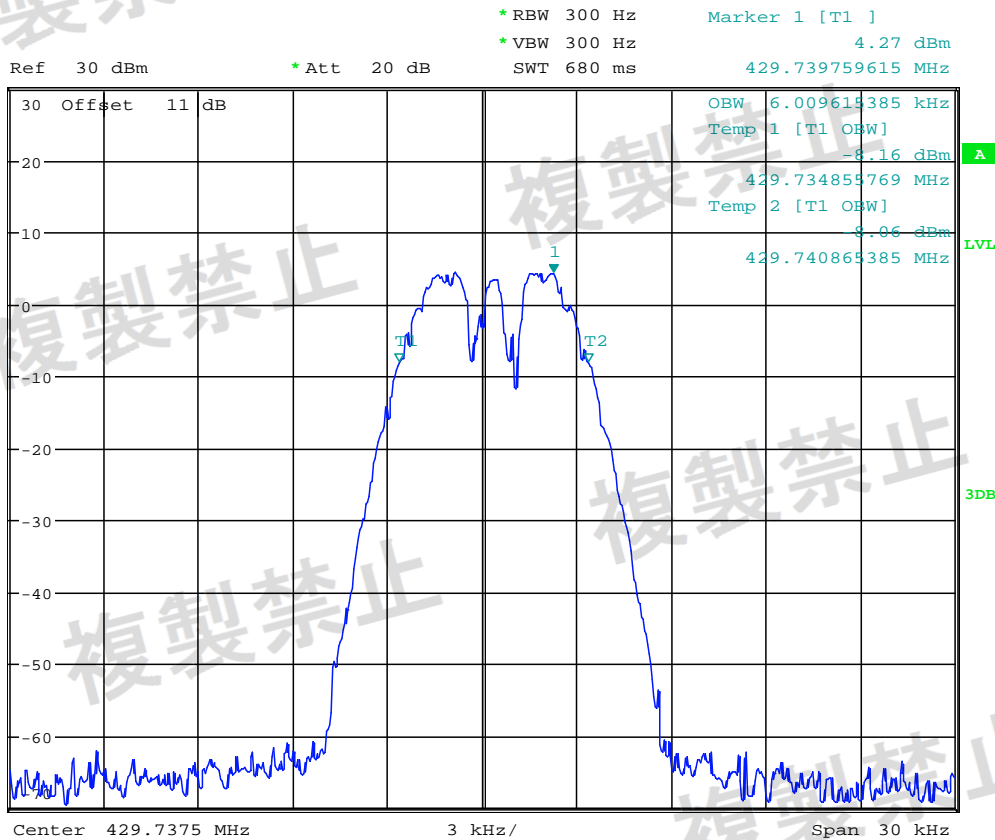


Occupied Bandwidth 90V

Date: 9.MAY.2018 17:02:39



1 PK
MAXH



Occupied Bandwidth 110V
Date: 9.MAY.2018 17:03:15

Measurement uncertainty: ± 0.45 kHz

Limits:

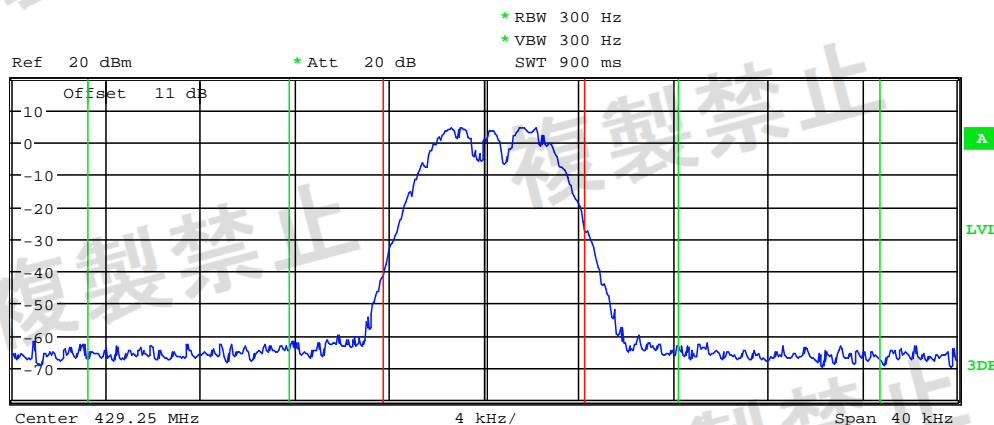
Under all test conditions	8.5kHz
---------------------------	--------

Test equipment used: ETSTW-RE 050, ETSTW-RE 055

3.4 Adjacent-channel leakage power



1 PK
MAXH



Tx Channel

Bandwidth

8.5 kHz

Power

14.18 dBm

Adjacent Channel

Bandwidth

8.5 kHz

Lower

-65.15 dB

Spacing

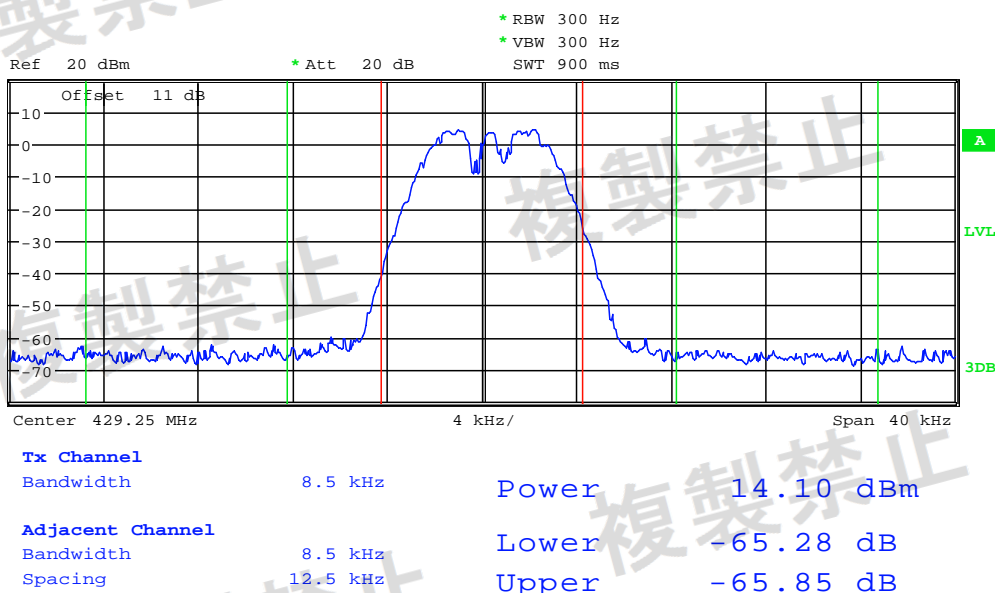
12.5 kHz

Upper

-65.68 dB

ACLR 100V

Date: 9.MAY.2018 17:13:34



ACLR 90V

Date: 9.MAY.2018 17:13:59

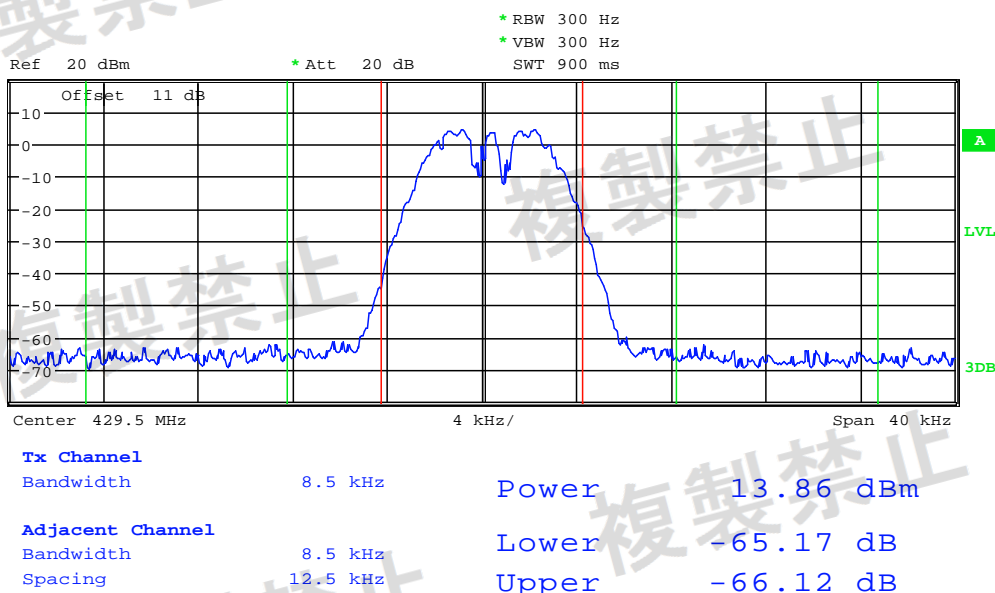


ACLR 110V

Date: 9.MAY.2018 17:13:10

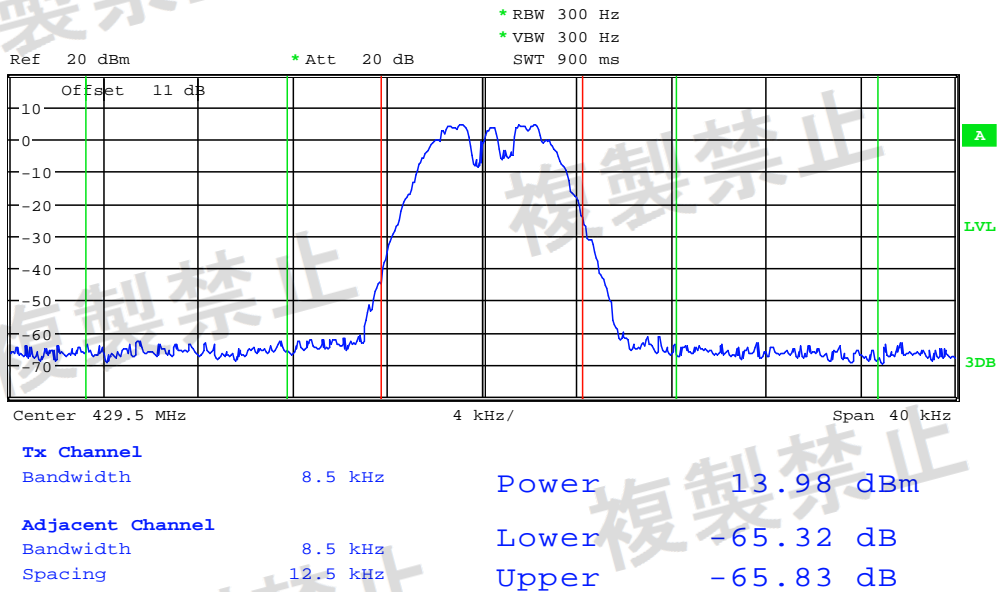
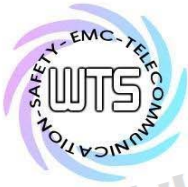


1 PK
MAXH



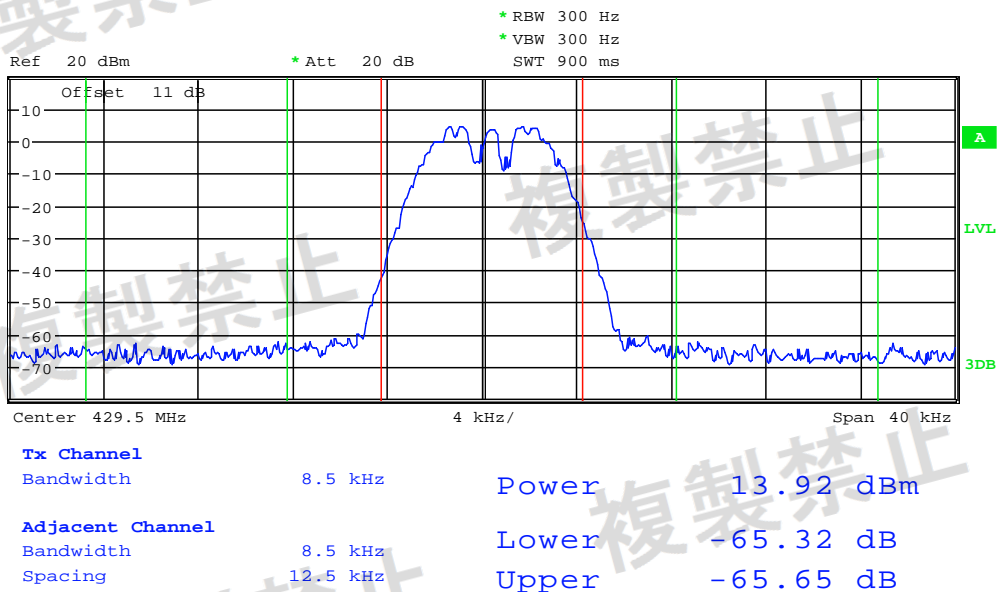
ACLR 100V

Date: 9.MAY.2018 17:19:25



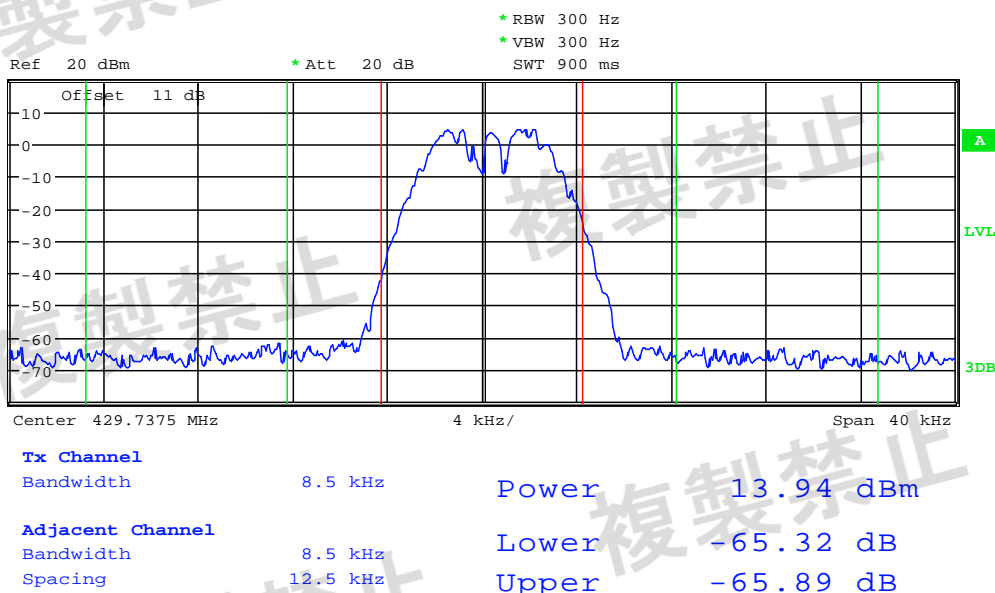
ACLR 90V

Date: 9.MAY.2018 17:19:09



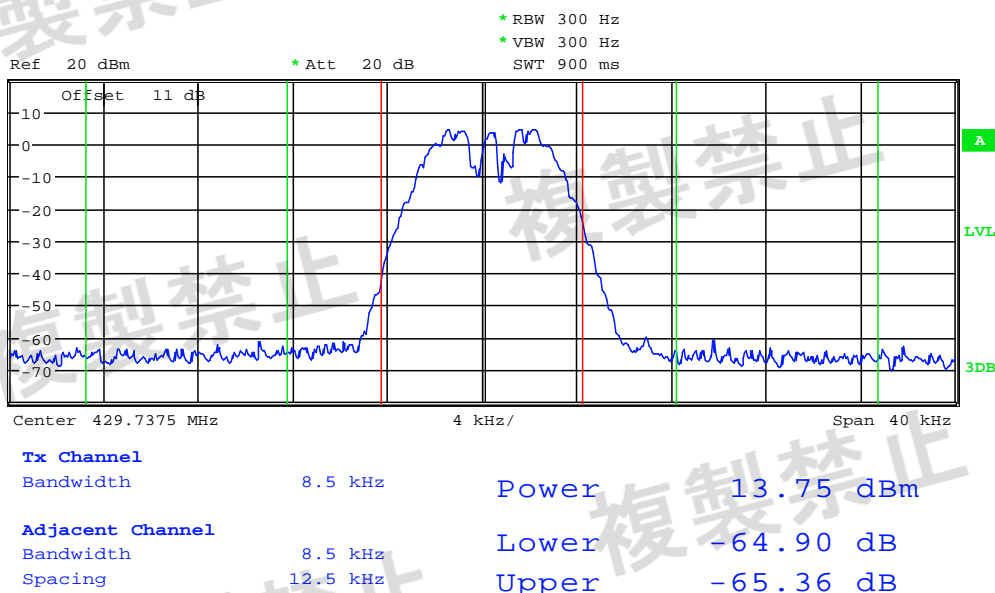
ACLR 110V

Date: 9.MAY.2018 17:19:46



ACLR 100V

Date: 9.MAY.2018 17:21:05

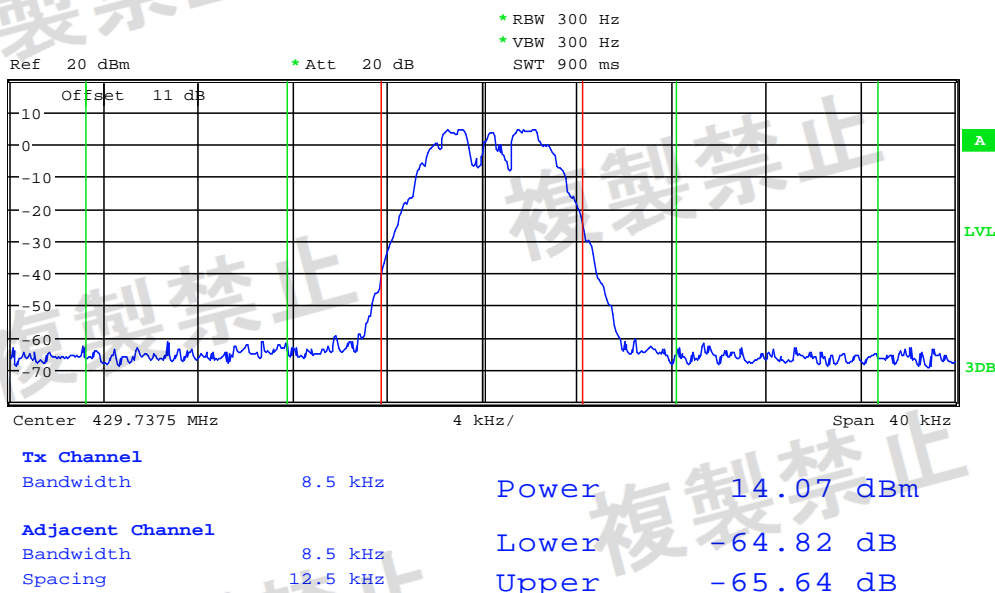


ACLR 90V

Date: 9.MAY.2018 17:21:26



1 PK
MAXH



ACLR 110V

Date: 9.MAY.2018 17:20:48

Measurement uncertainty: ± 0.80 dB

Limits:

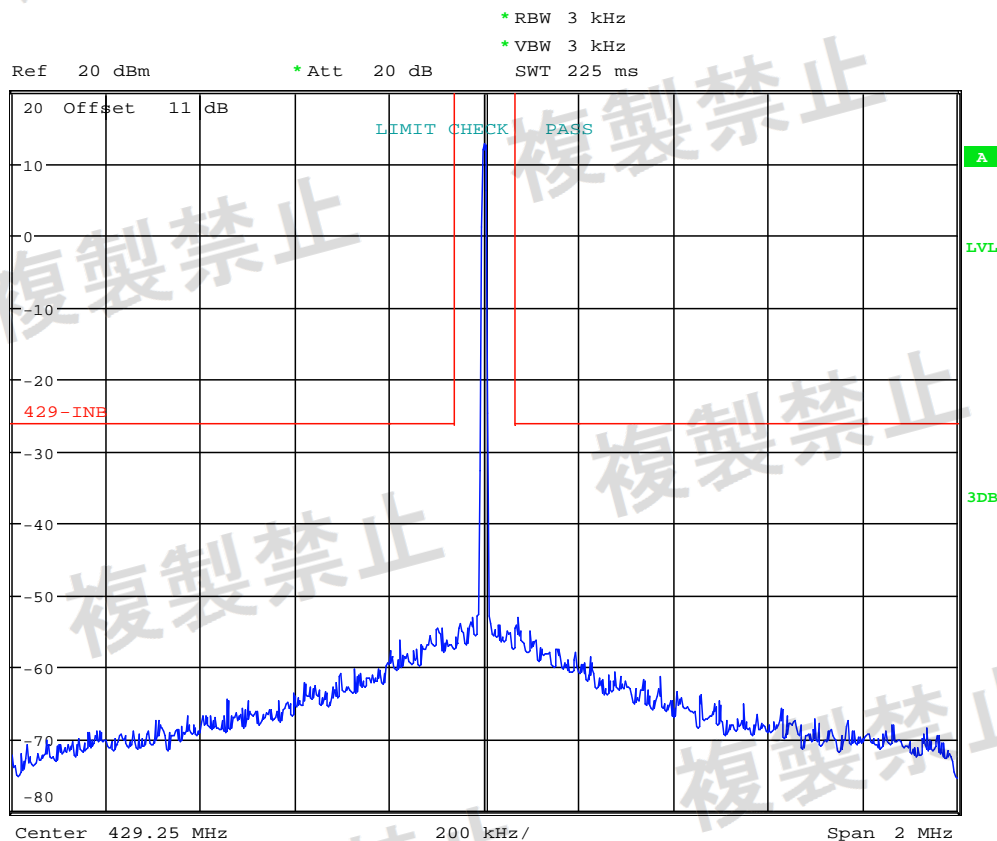
Under all test conditions	-40dB
---------------------------	-------

Test equipment used: ETSTW-RE 050, ETSTW-RE 055

3.5 Spurious emission Intensity (In Band)



1 PK
MAXH

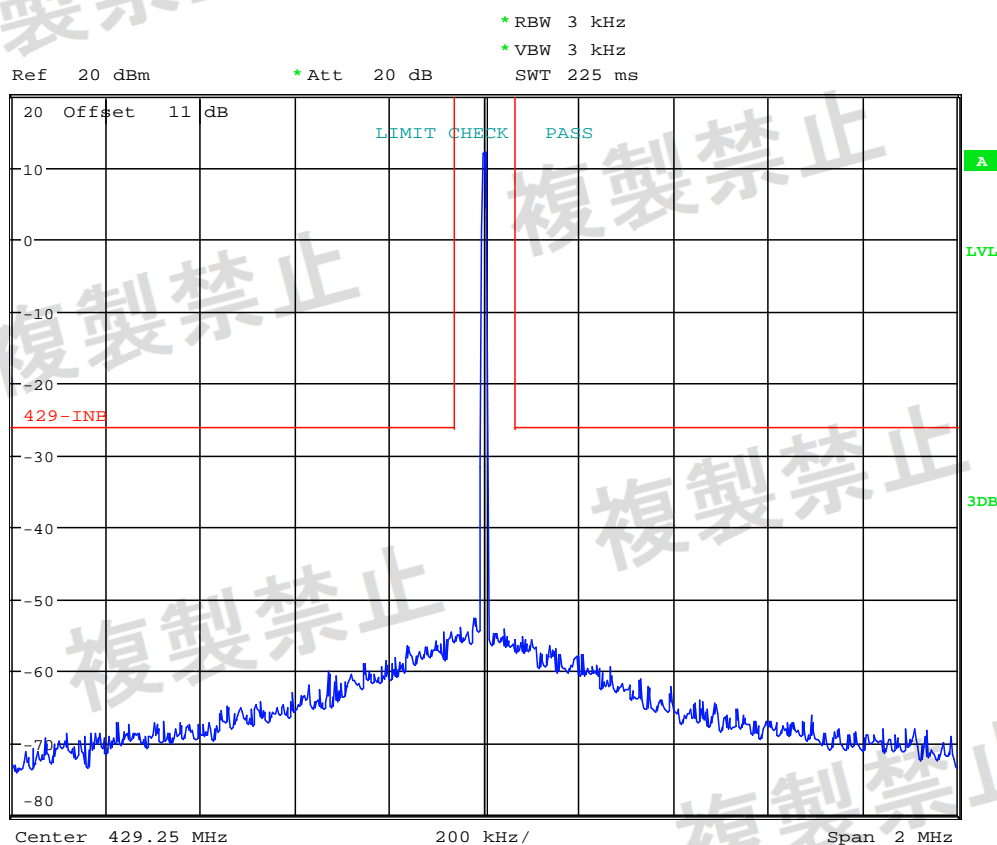


In Band spurious emission 429.25MHz 100V

Date: 9.MAY.2018 17:57:23



1 PK
MAXH



In Band spurious emission 429.25MHz 90V

Date: 9.MAY.2018 17:57:14



PS

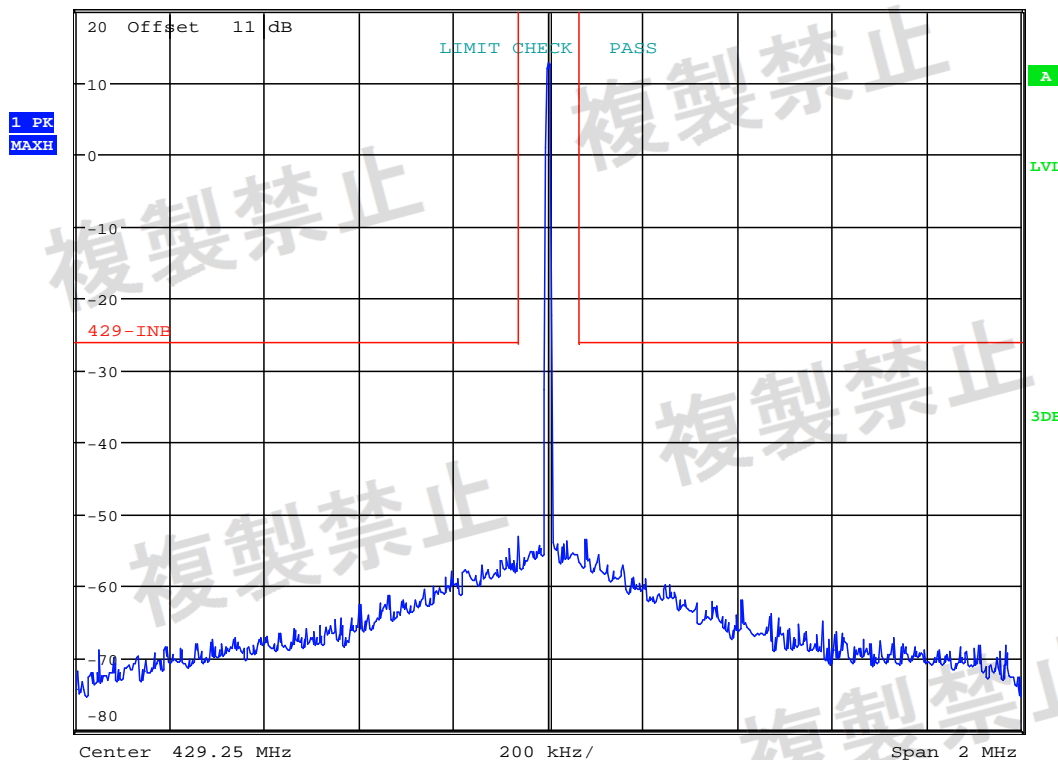
* RBW 3 kHz

* VBW 3 kHz

Ref 20 dBm

* Att 20 dB

SWT 225 ms

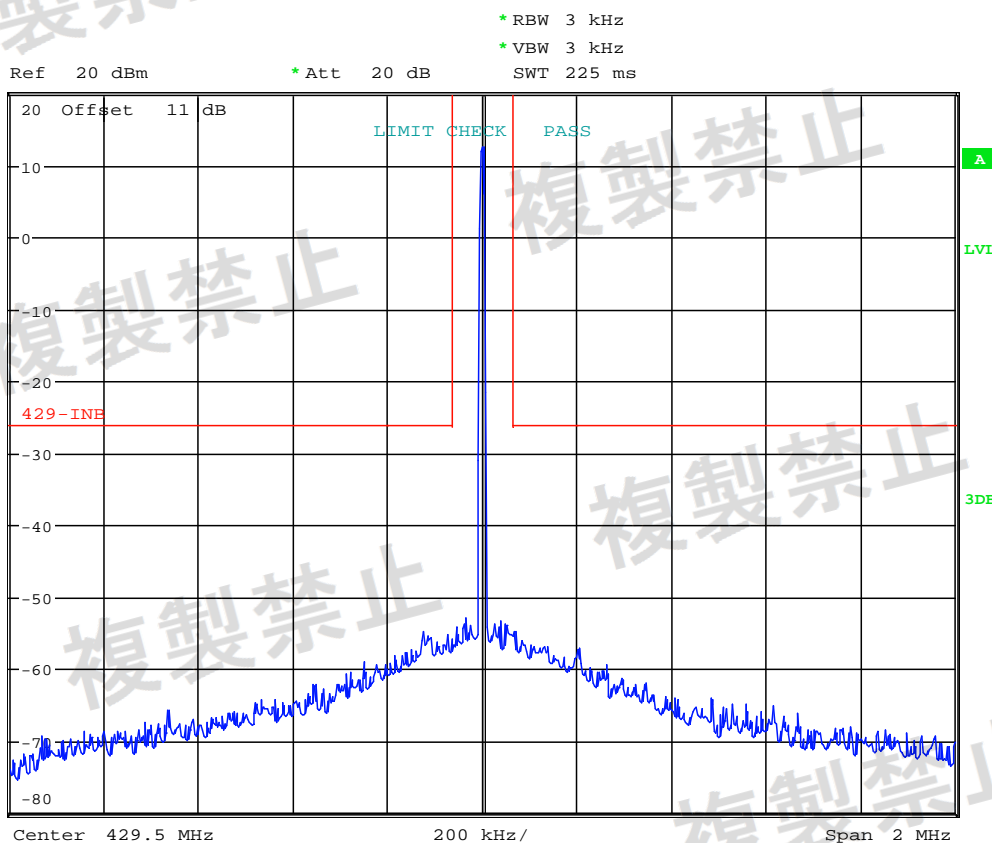


In Band spurious emission 429.25MHz 110V

Date: 9.MAY.2018 17:57:32



1 PK
MAXH

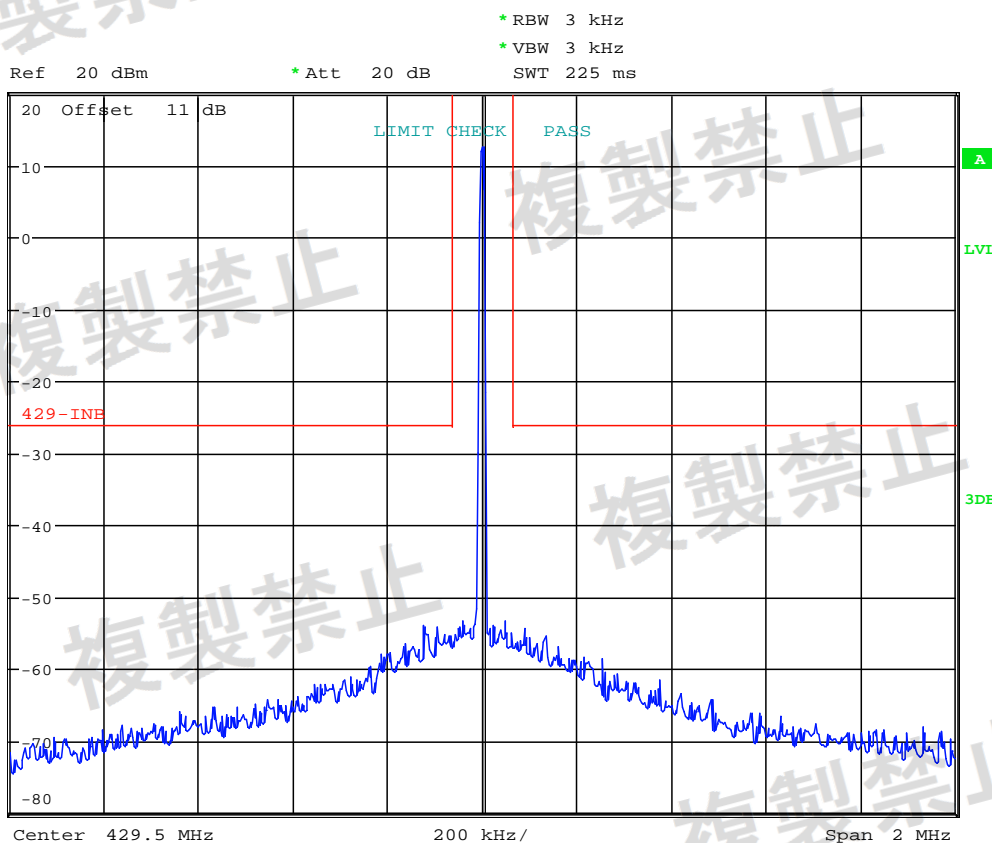


In Band spurious emission 429.5MHz 100V

Date: 9.MAY.2018 17:56:17



1 PK
MAXH

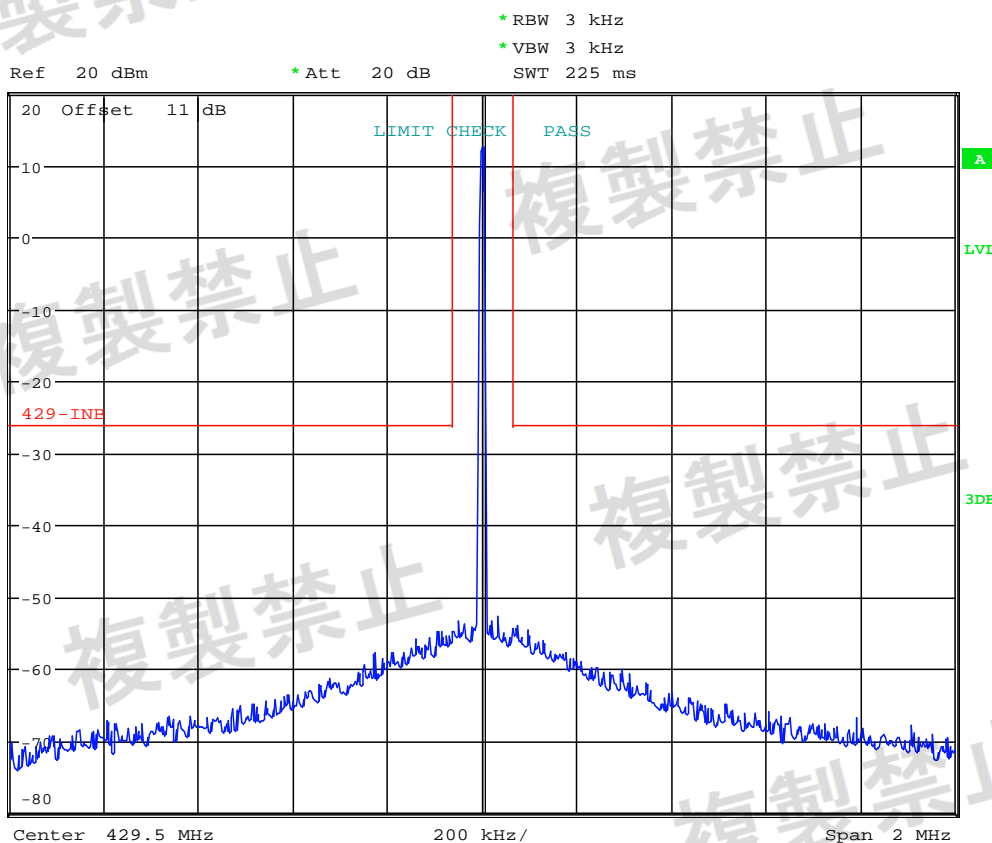


In Band spurious emission 429.5MHz 90V

Date: 9.MAY.2018 17:56:28



1 PK
MAXH

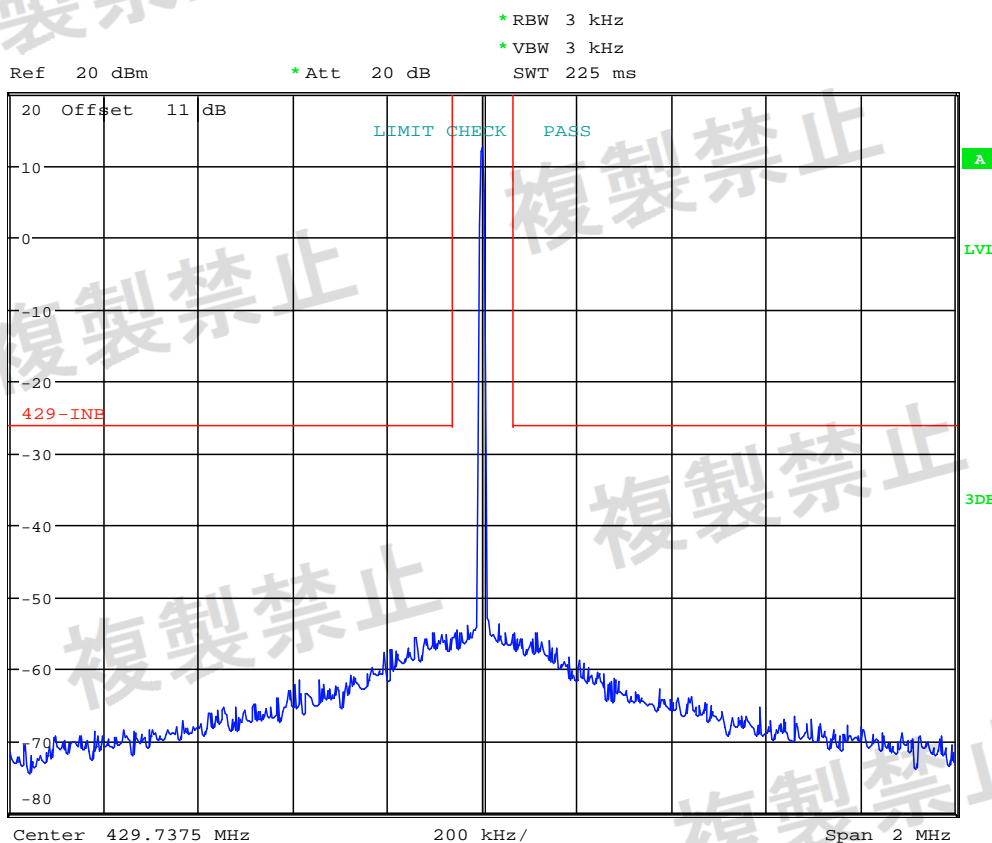


In Band spurious emission 429.5MHz 110V

Date: 9.MAY.2018 17:56:08



1 PK
MAXH

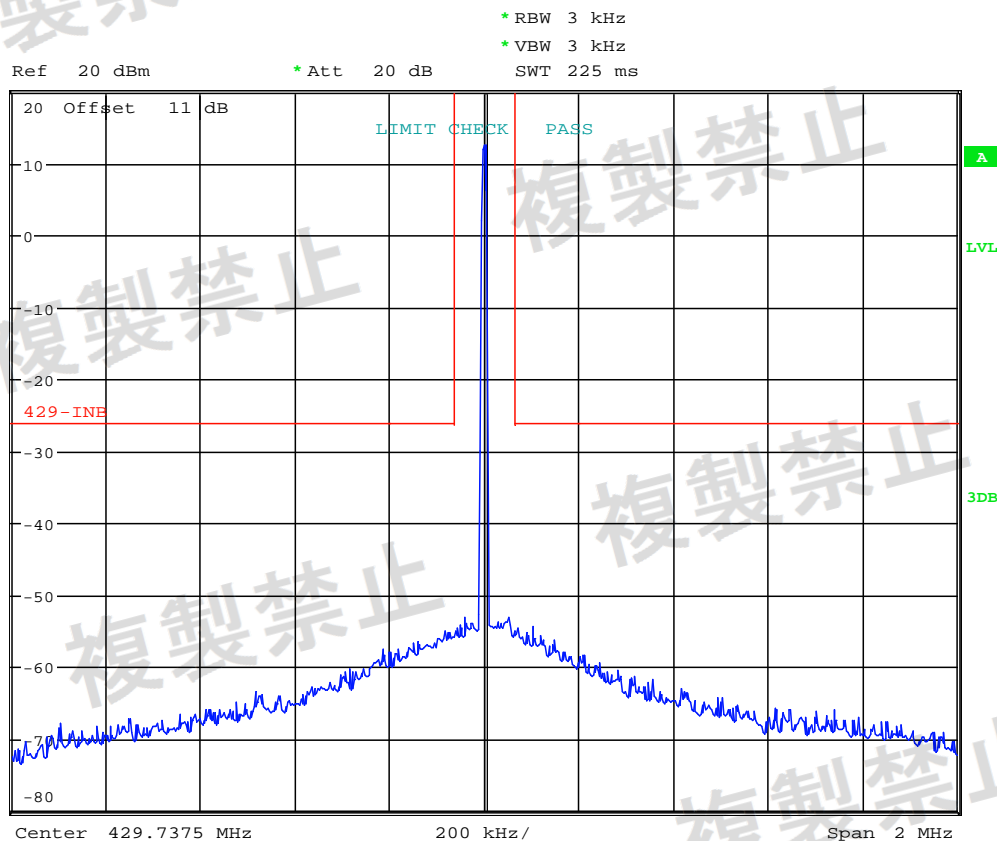


In Band spurious emission 429.7375MHz 100V

Date: 9.MAY.2018 17:55:08



1 PK
MAXH

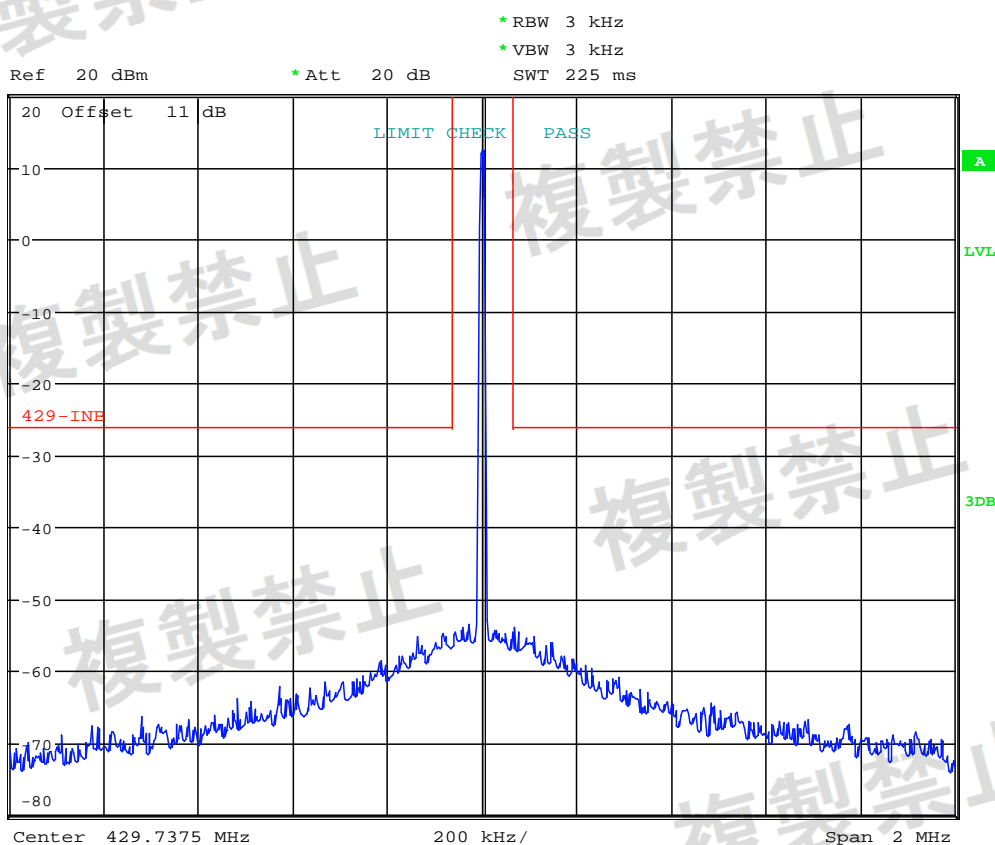


In Band spurious emission 429.7375MHz 90V

Date: 9.MAY.2018 17:54:55



1 PK
MAXH



In Band spurious emission 429.7375MHz 110V

Date: 9.MAY.2018 17:55:18

Measurement uncertainty: $\pm 1.726\text{dB}$

Limits:

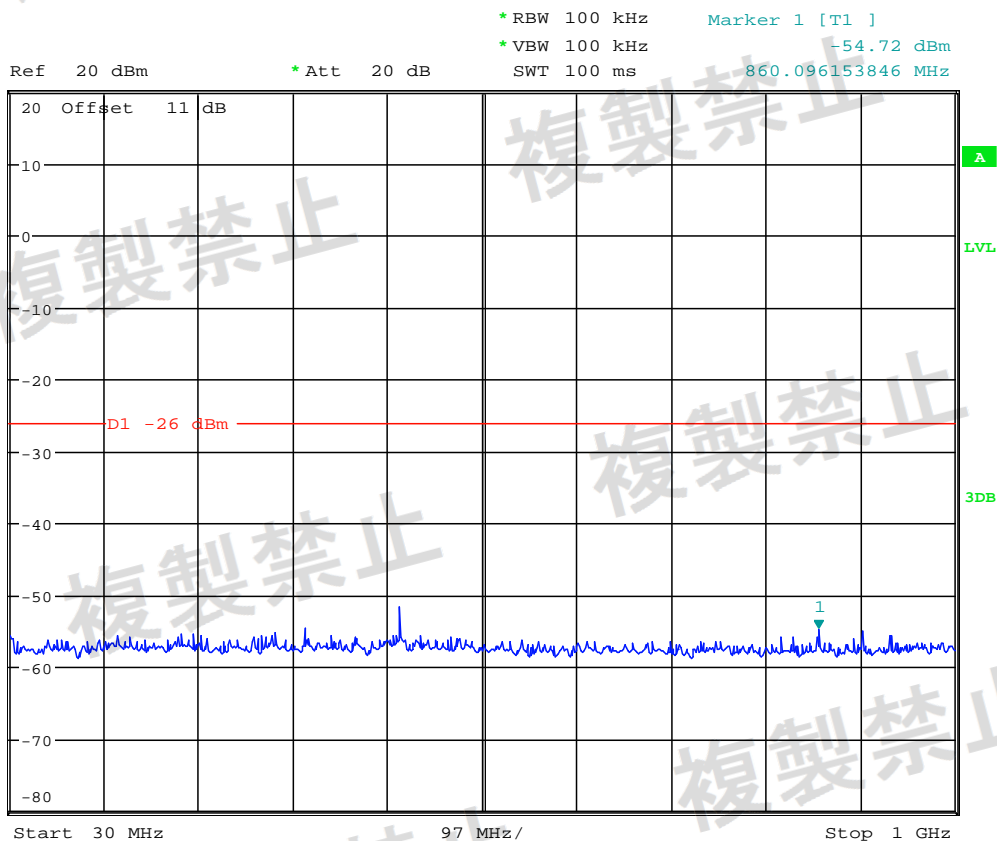
Under all test conditions	2.5uW(-26dBm)
---------------------------	---------------

Test equipment used: ETSTW-RE 050, ETSTW-RE 055

3.6 Spurious emissions (conducted)_ transmitter



1 PK
MAXH



Unwanted spurious emission 429.25MHz 100V

Date: 9.MAY.2018 17:38:27



Worldwide Testing Services(Taiwan) Co., Ltd.



* RBW 1 MHz
* VBW 1 MHz
SWT 5 ms

Marker 1 [T1]
-47.59 dBm
2.532051282 GHz

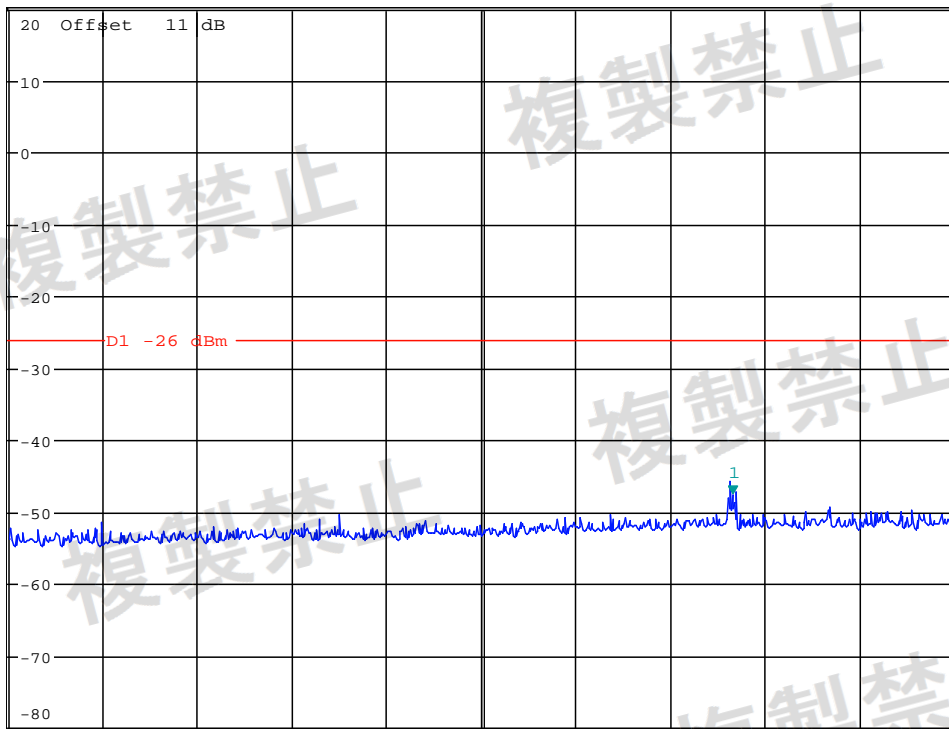
Ref 20 dBm

* Att 20 dB

SWT 5 ms

2.532051282 GHz

1 PK
MAXH



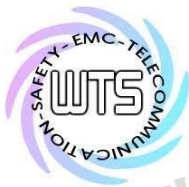
Start 1 GHz

200 MHz/

Stop 3 GHz

Unwanted spurious emission 429.25MHz 100V

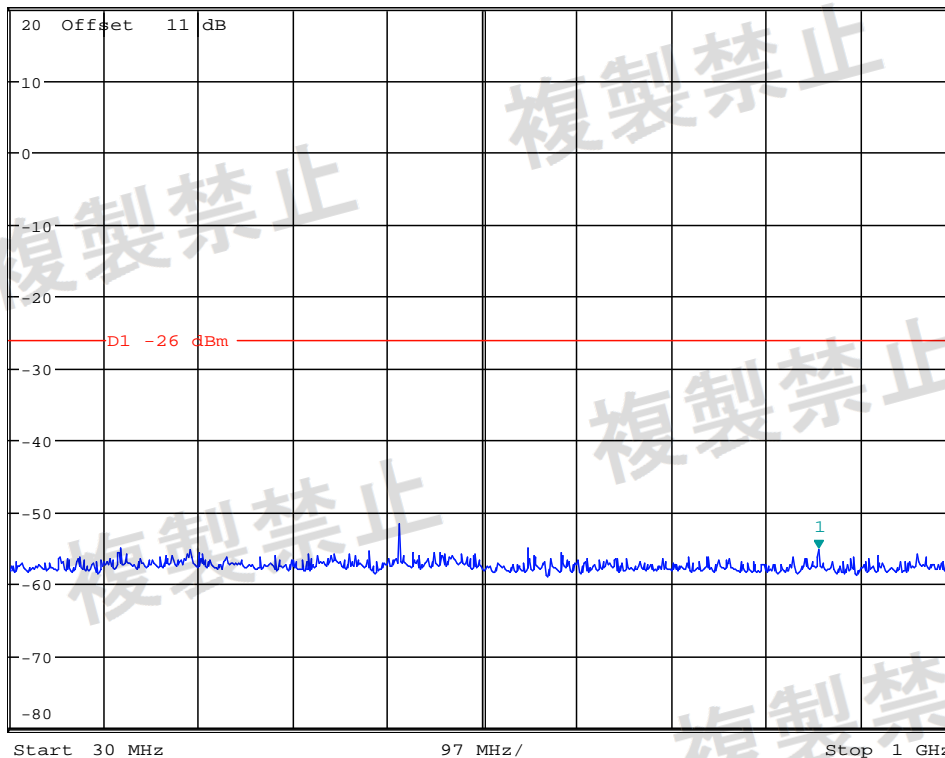
Date: 9.MAY.2018 17:31:19



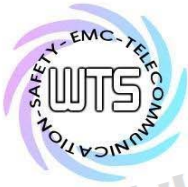
Worldwide Testing Services(Taiwan) Co., Ltd.



Ref 20 dBm * Att 20 dB * RBW 100 kHz Marker 1 [T1] -55.05 dBm
* VBW 100 kHz SWT 100 ms 860.096153846 MHz



Unwanted spurious emission 429.25MHz 90V
Date: 9.MAY.2018 17:38:42

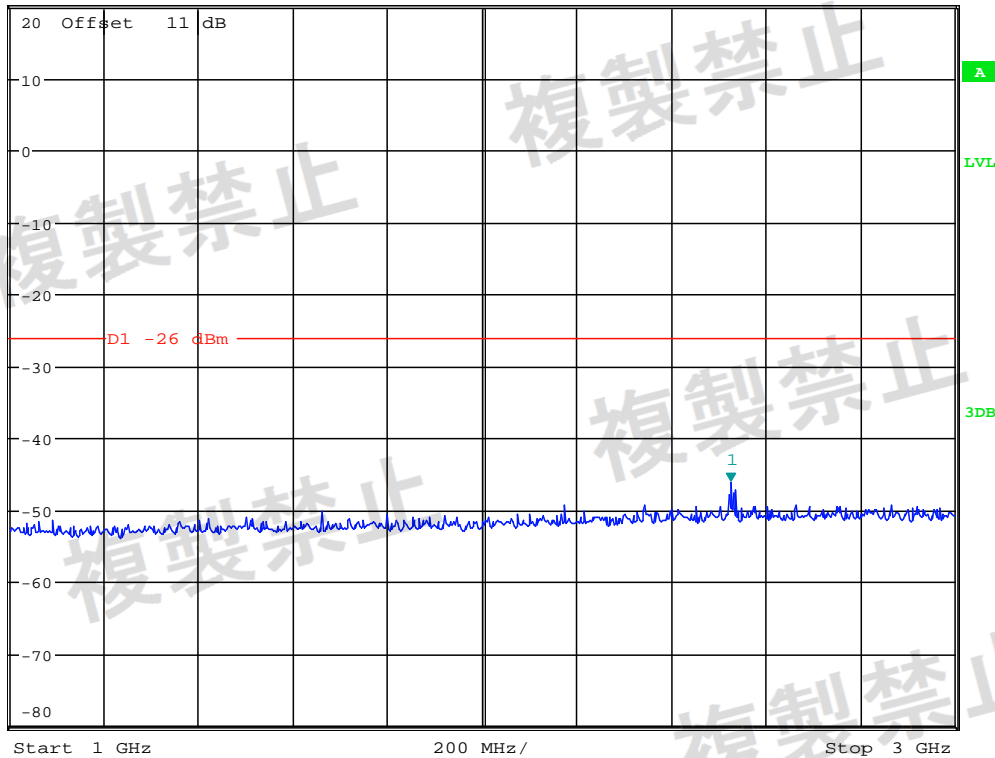


Worldwide Testing Services(Taiwan) Co., Ltd.



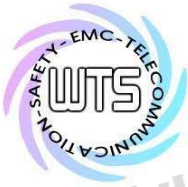
1 PK
MAXH

Ref 20 dBm * Att 20 dB * RBW 1 MHz Marker 1 [T1]
* VBW 1 MHz -46.16 dBm
SWT 5 ms 2.525641026 GHz



Unwanted spurious emission 429.25MHz 90V

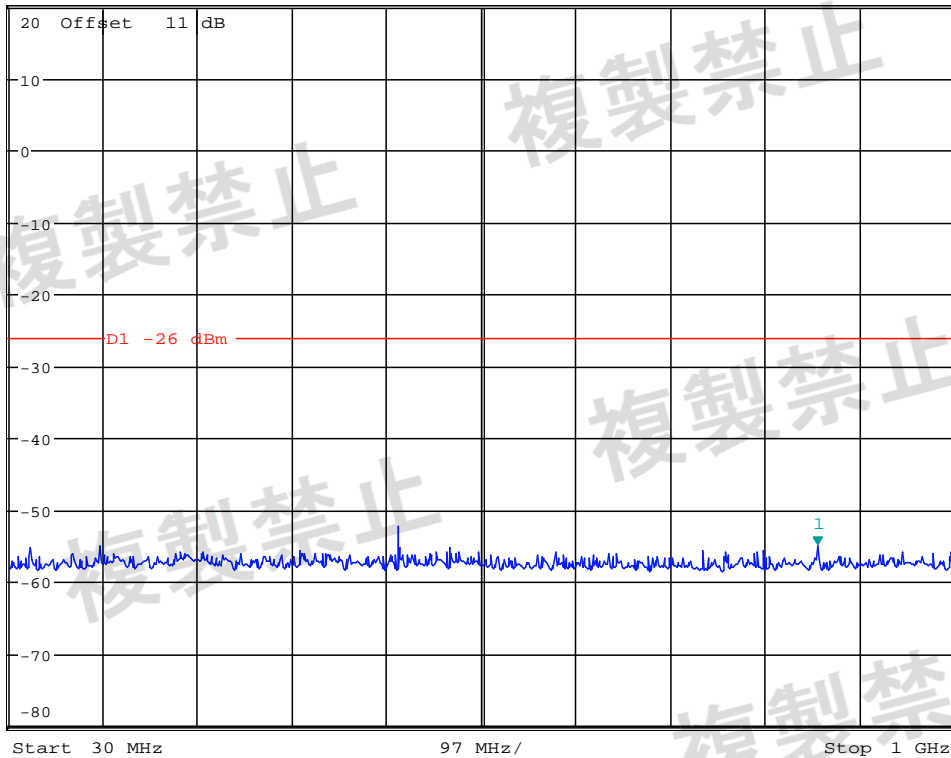
Date: 9.MAY.2018 17:31:07



Worldwide Testing Services(Taiwan) Co., Ltd.



Ref 20 dBm * Att 20 dB * RBW 100 kHz Marker 1 [T1]
* VBW 100 kHz -54.87 dBm
SWT 100 ms 860.096153846 MHz



Unwanted spurious emission 429.25MHz 110V

Date: 9.MAY.2018 17:38:09

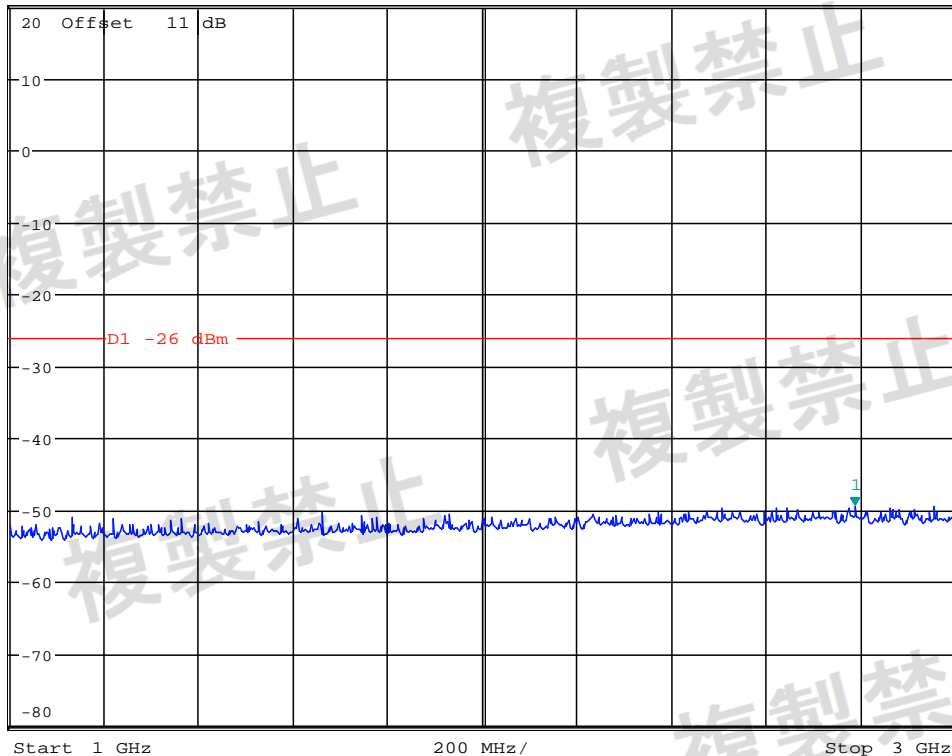


Worldwide Testing Services(Taiwan) Co., Ltd.



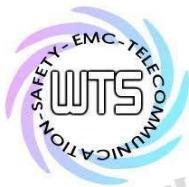
1 PK
MAXH

Ref 20 dBm * Att 20 dB * RBW 1 MHz * VBW 1 MHz SWT 5 ms Marker 1 [T1] -49.37 dBm 2.788461538 GHz



Unwanted spurious emission 429.25MHz 110V

Date: 9.MAY.2018 17:31:45

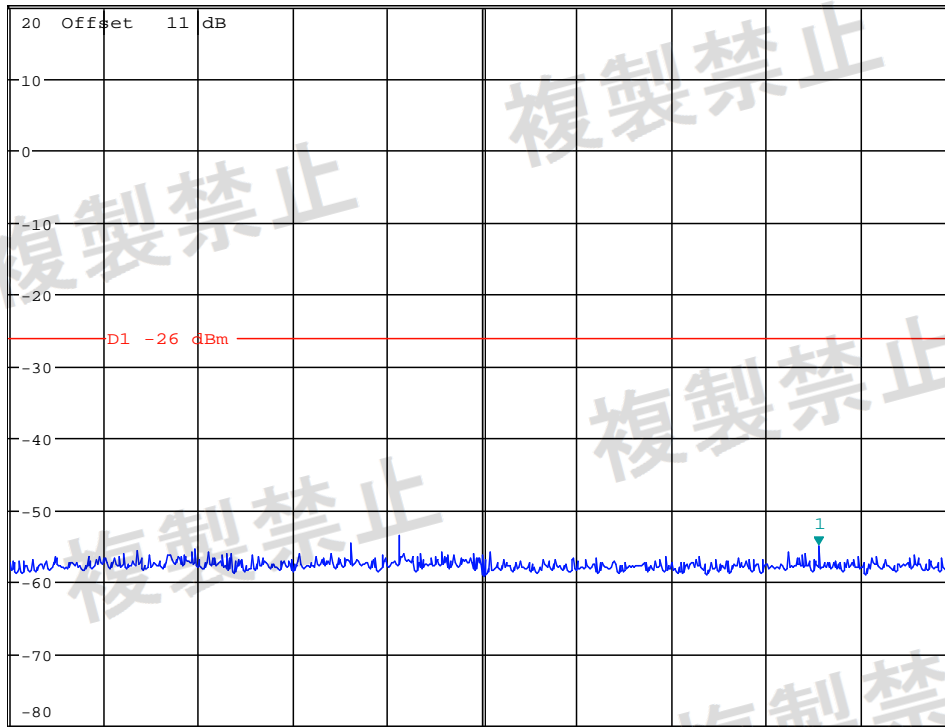


*RBW 100 kHz Marker 1 [T1]
*VBW 100 kHz -54.89 dBm
SWT 100 ms 860.096153846 MHz

Ref 20 dBm

*Att 20 dB

1 PK
MAXH



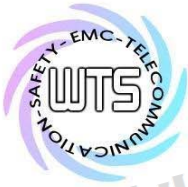
Start 30 MHz

97 MHz/

Stop 1 GHz

Unwanted spurious emission 429.5MHz 100V

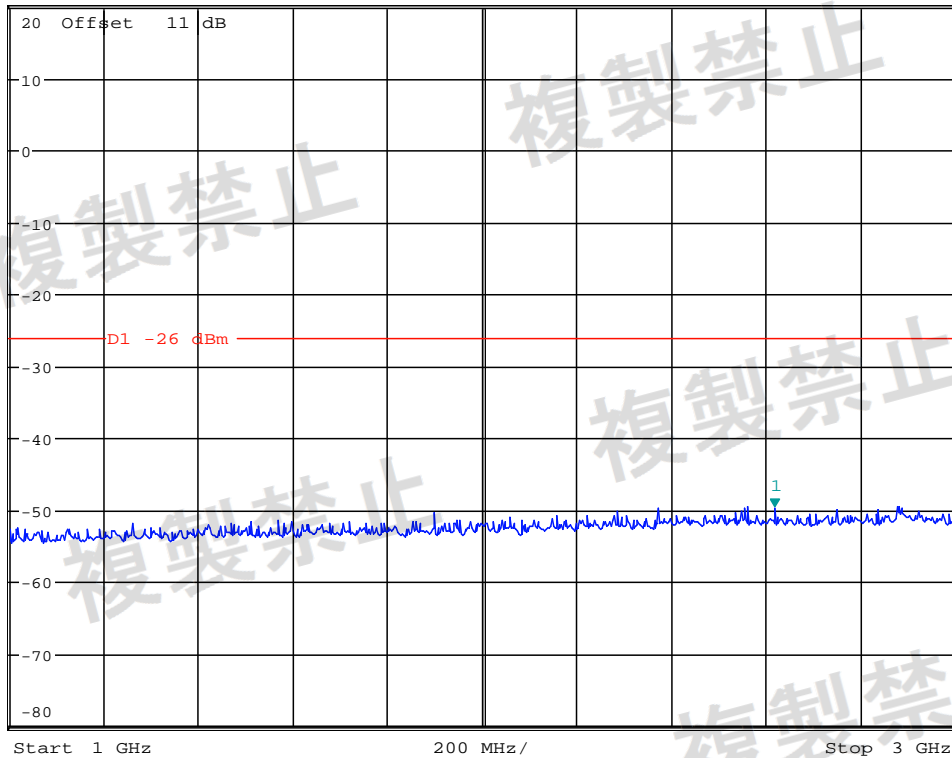
Date: 9.MAY.2018 17:40:12



Worldwide Testing Services(Taiwan) Co., Ltd.



Ref 20 dBm * Att 20 dB * RBW 1 MHz Marker 1 [T1]
* VBW 1 MHz -49.58 dBm
SWT 5 ms 2.618589744 GHz



Unwanted spurious emission 429.5MHz 100V

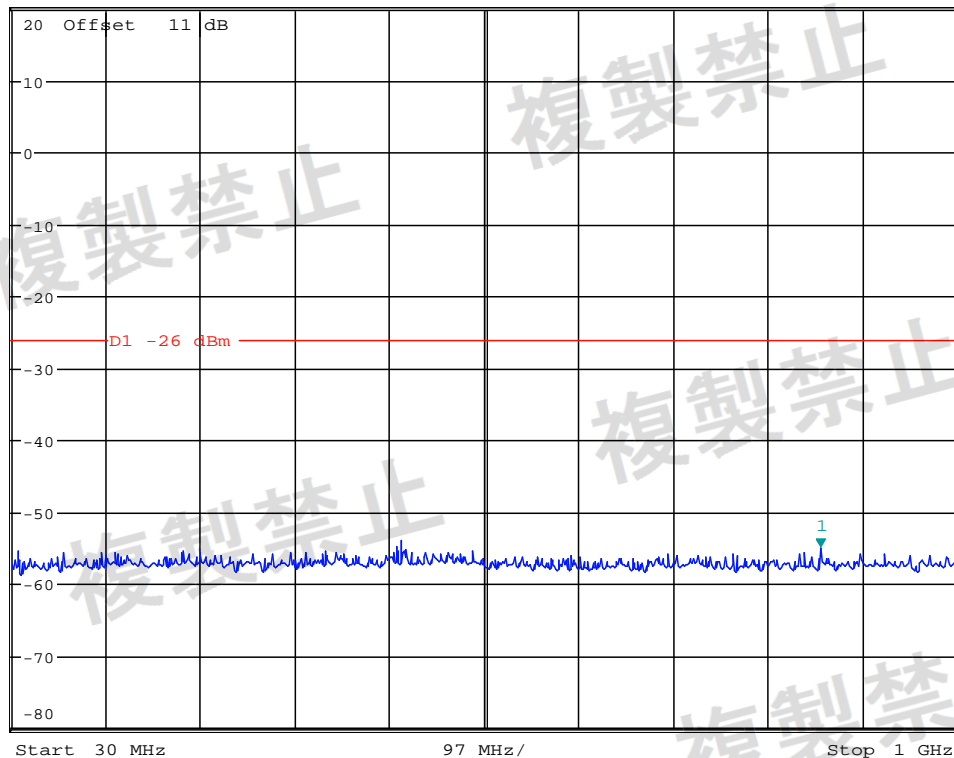
Date: 9.MAY.2018 17:29:24



Worldwide Testing Services(Taiwan) Co., Ltd.



Ref 20 dBm * Att 20 dB * RBW 100 kHz Marker 1 [T1]
* VBW 100 kHz -54.94 dBm
SWT 100 ms 860.096153846 MHz



Unwanted spurious emission 429.5MHz 90V

Date: 9.MAY.2018 17:40:01



Worldwide Testing Services(Taiwan) Co., Ltd.



* RBW 1 MHz
* VBW 1 MHz
SWT 5 ms

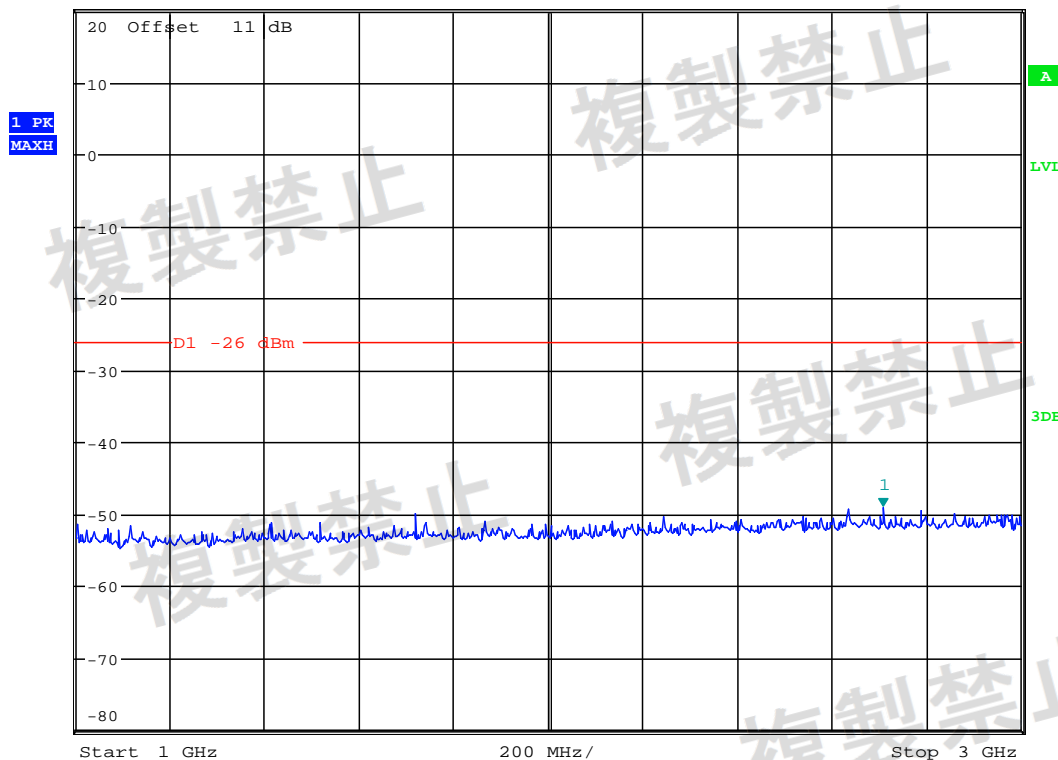
Marker 1 [T1]
-48.94 dBm
2.708333333 GHz

Ref 20 dBm

* Att 20 dB

SWT 5 ms

2.708333333 GHz



Unwanted spurious emission 429.5MHz 90V

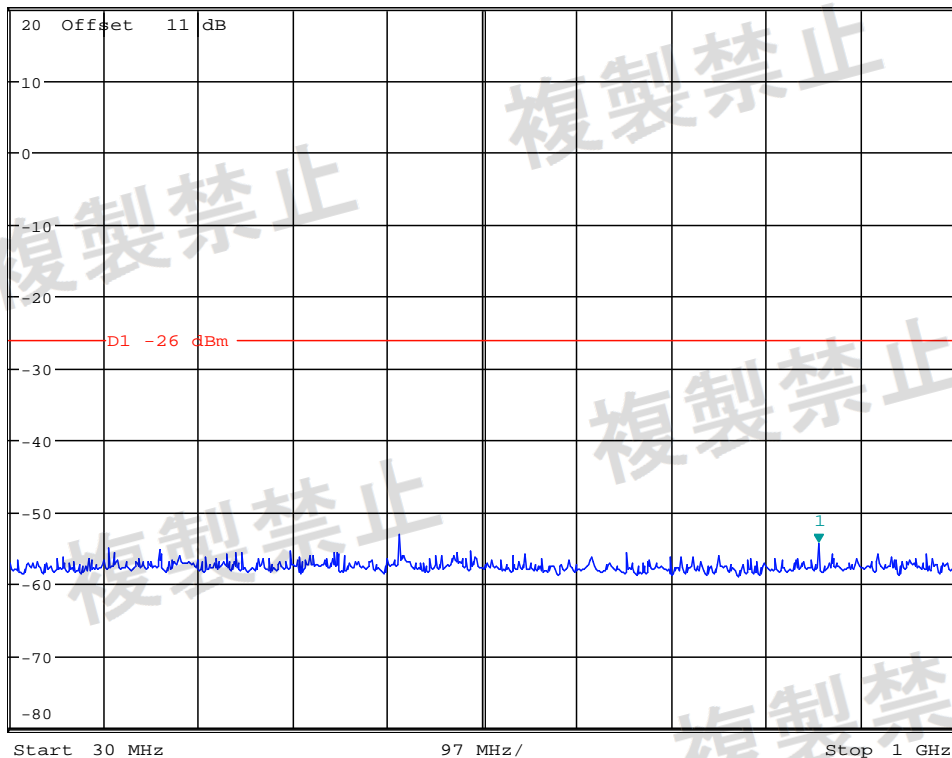
Date: 9.MAY.2018 17:29:38



Worldwide Testing Services(Taiwan) Co., Ltd.



Ref 20 dBm * Att 20 dB * RBW 100 kHz Marker 1 [T1]
* VBW 100 kHz -54.21 dBm
SWT 100 ms 860.096153846 MHz



Unwanted spurious emission 429.5MHz 110V

Date: 9.MAY.2018 17:40:24



* RBW 1 MHz
* VBW 1 MHz
SWT 5 ms

Marker 1 [T1]
-49.39 dBm
2.695512821 GHz

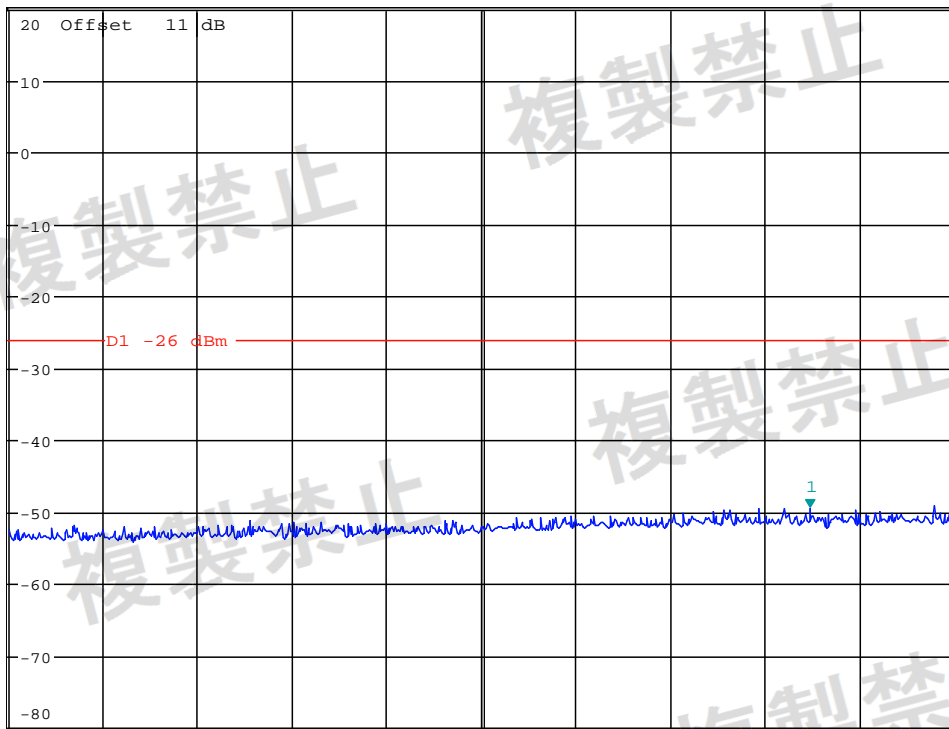
Ref 20 dBm

* Att 20 dB

SWT 5 ms

2.695512821 GHz

1 PK
MAXH



Start 1 GHz

200 MHz/

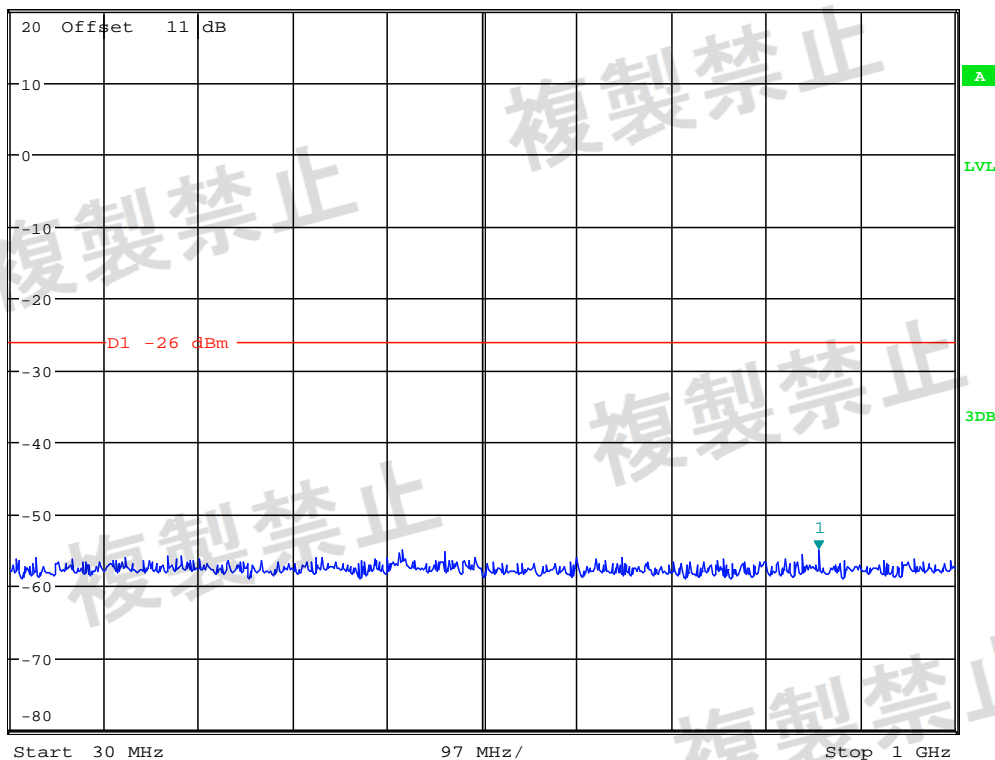
Stop 3 GHz

Unwanted spurious emission 429.5MHz 110V

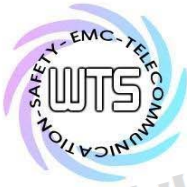
Date: 9.MAY.2018 17:29:09



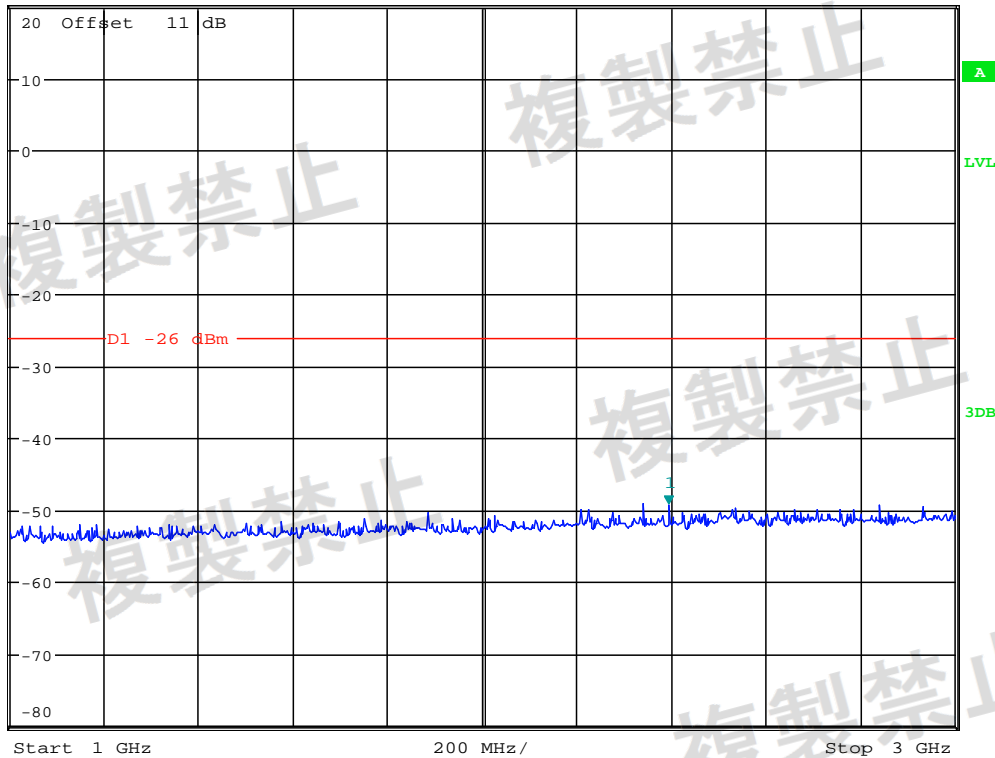
Ref 20 dBm * Att 20 dB * RBW 100 kHz Marker 1 [T1]
* VBW 100 kHz -54.89 dBm
SWT 100 ms 860.096153846 MHz



Unwanted spurious emission 429.7375MHz 100V
Date: 9.MAY.2018 17:41:49



Ref 20 dBm * Att 20 dB * RBW 1 MHz Marker 1 [T1]
* VBW 1 MHz -49.29 dBm
SWT 5 ms 2.394230769 GHz

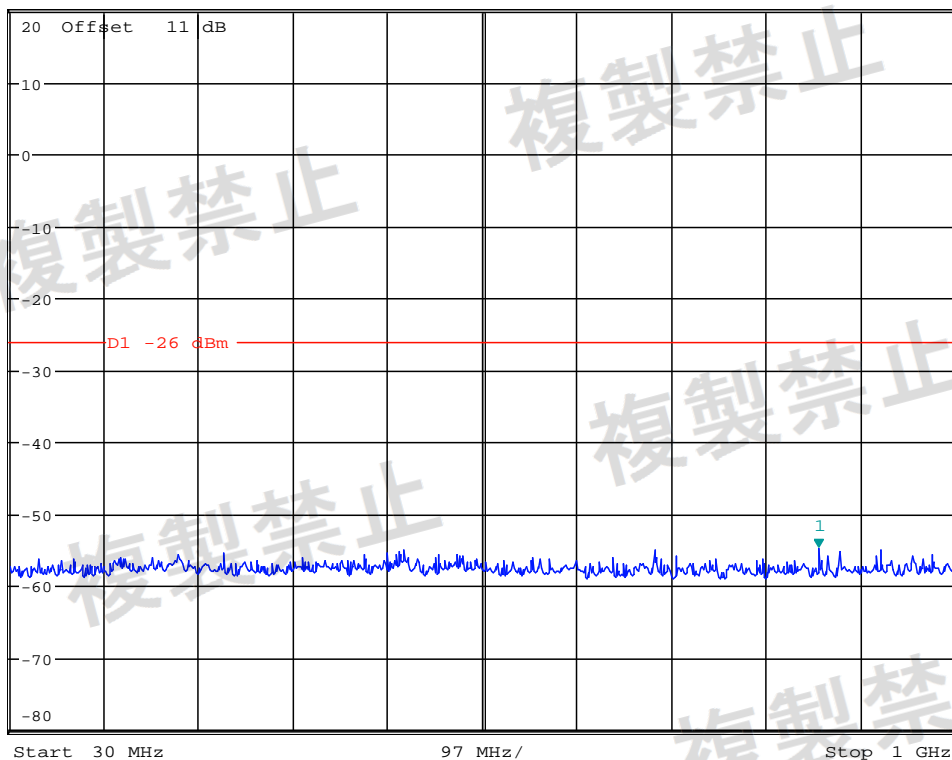


Unwanted spurious emission 429.7375MHz 100V

Date: 9.MAY.2018 17:27:36



Ref 20 dBm * Att 20 dB * RBW 100 kHz Marker 1 [T1]
* VBW 100 kHz -54.65 dBm
SWT 100 ms 860.096153846 MHz

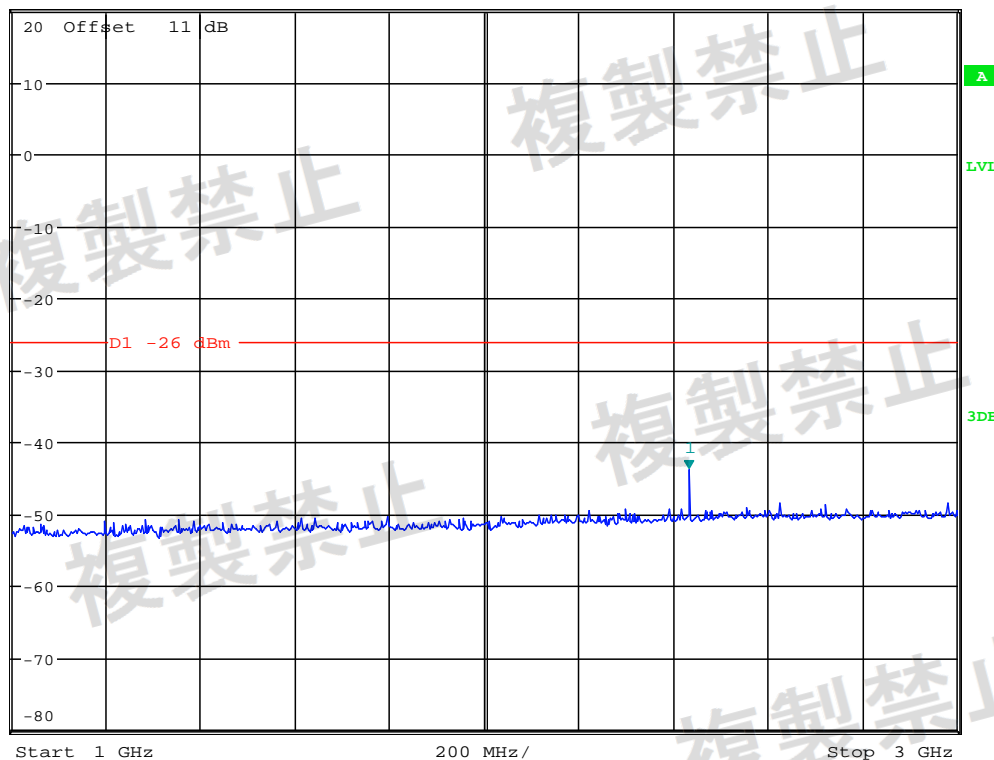


Unwanted spurious emission 429.7375MHz 90V

Date: 9.MAY.2018 17:42:01

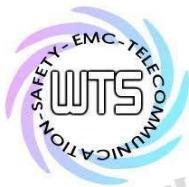


Ref 20 dBm * Att 20 dB RBW 1 MHz VBW 1 MHz SWT 5 ms
Marker 1 [T1] -43.77 dBm 2.432692308 GHz

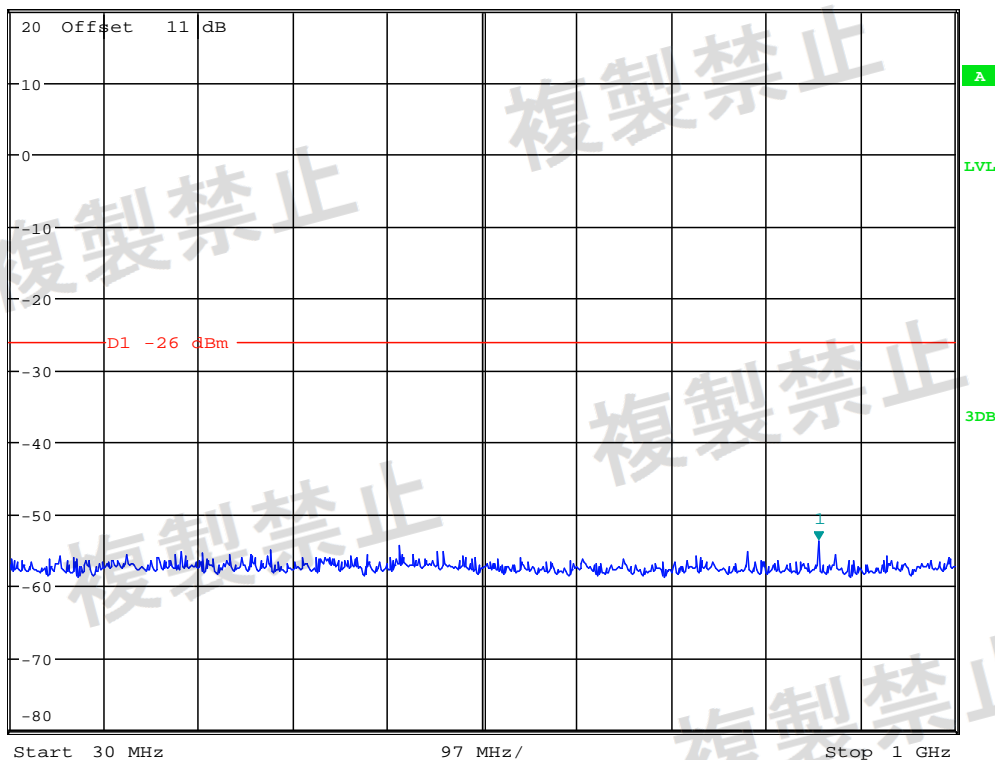


Unwanted spurious emission 429.7375MHz 90V

Date: 9.MAY.2018 17:27:18

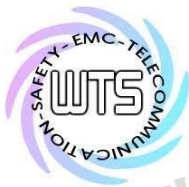


Ref 20 dBm * Att 20 dB * RBW 100 kHz Marker 1 [T1]
* VBW 100 kHz -53.72 dBm
SWT 100 ms 860.096153846 MHz

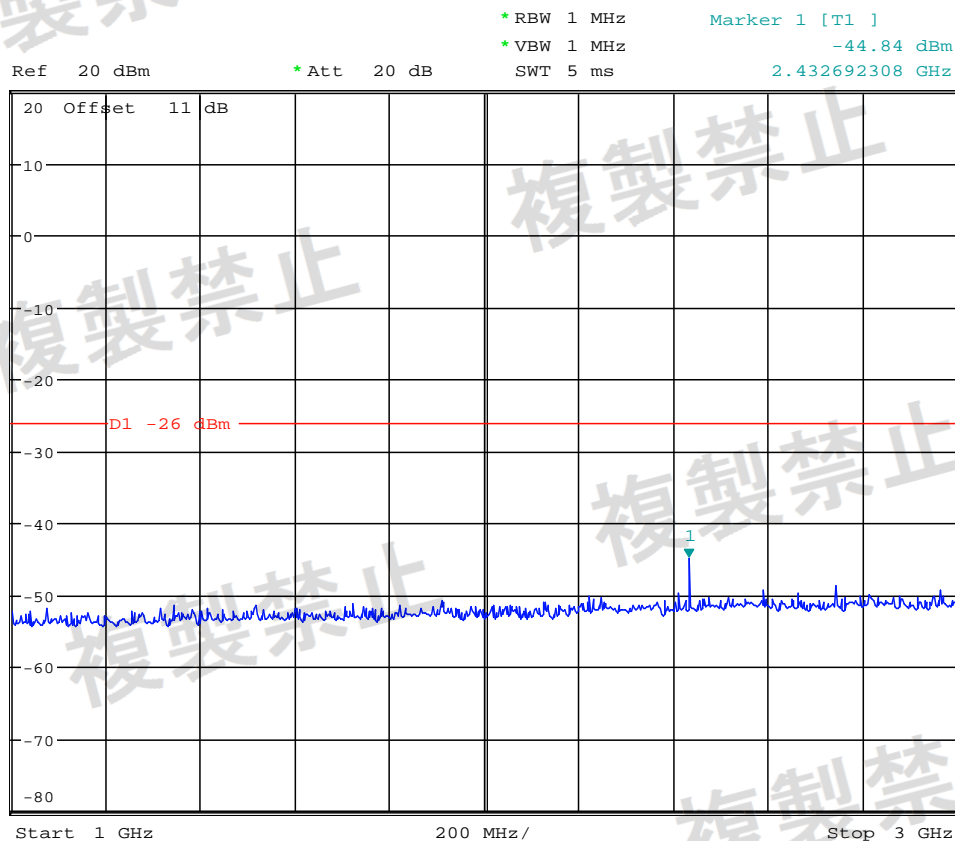


Unwanted spurious emission 429.7375MHz 110V

Date: 9.MAY.2018 17:41:38



1 PK
MAXH



Unwanted spurious emission 429.7375MHz 110V

Date: 9.MAY.2018 17:27:54

Measurement uncertainty: ± 1.726 dB

Limits:

Receiver operating	2.5 uW (-26 dBm)
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Test equipment used: ETSTW-RE 050, ETSTW-RE 055

3.7 Antenna Power

Max Output Power (Unit in mW)				Limit
Voltage	429.25MHz	429.50MHz	429.7375MHz	1W
Vnormal = 100V	9.57	9.66	9.77	
Vmin = 90V	9.57	9.66	9.74	
Vmax = 110V	9.57	9.61	9.81	

Tolerance based on rated output power 9 mW	
9.81 (mW)	9.00%
9.57 (mW)	6.33%

Measurement uncertainty: $\pm 1.01\text{dB}$

Limits:

Under all test conditions	Tolerance: +20%,-50%
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Test equipment used: ETSTW-RE 050, ETSTW-RE 073, ETSTW-RE 074



3.8 Spurious emission receiver

Measurement uncertainty: ± 1.726 dB

Limit

Receiver operating	2.5 uW (-26 dBm)
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Test equipment used: ETSTW-RE 050, ETSTW-RE 055

Explanation: This test is not required because the EUT is a transmitter only.