

# Y Shenzhen Toby Technology Co., Ltd.



Report No.: TBR-C-202309-0169-81

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# **FCC Radio Test Report**

FCC ID: 2BCVT-NES-1

**Report No.** : TBR-C-202309-0169-81

**Applicant**: Cherub Technology Co., Ltd.

**Equipment Under Test (EUT)** 

**EUT Name** : Digital Wind Instrument

Model No. : NES-1

Serial Model No. : ----

Brand Name : NUX

Sample ID : 202309-0169-4-1# & 202309-0169-4-2#

**Receipt Date** : 2024-01-11

**Test Date** : 2024-01-11 to 2024-02-22

Issue Date : 2024-02-22

Standards : FCC Part 15, Subpart C 15.249

**Test Method** : ANSI C63.10:2013

Conclusions : PASS

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

The EUT technically complies with the FCC requirements

Tested By : John Lee

Jolin Lee

Reviewed By :

Approved By : WAN SV

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in the report.

TB-RF-074-1. 0



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# **Revision History**

Report No.	Version	Description	Issued Date
TBR-C-202309-0169-81	Rev.01	Initial issue of report	2024-02-22
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# 1. General Information about EUT

### 1.1 Client Information

Applicant		Cherub Technology Co., Ltd.
Address : No.10, Keji 9th Road, Tangjiawan Town, Zhuhai High-tech Zone Zhuhai Guangdong, China 519080  Manufacturer : Cherub Technology Co., Ltd.		
Manufacturer	2	Cherub Technology Co., Ltd.
Address		No.10, Keji 9th Road, Tangjiawan Town, Zhuhai High-tech Zone Zhuhai, Guangdong, China 519080

# 1.2 General Description of EUT (Equipment Under Test)

<b>EUT Name</b>	:	Digital Wind Instrument		
Model(s)	:	NES-1		
Model Difference	:			
CALL DE		Operation Frequency: 5729~5846MHz		
Product		Number of Channel:	40 Channel	
	•	Out Power:	87.26dBuV/m@3m Peak	
Description		Antenna Gain:	3.43dBi PCB antenna	
		Modulation Type:	FSK	
Power Rating	Ŀ	Input: DC 5V		
Li-ion Polymer Battery	3	DC 3.7V by 5000mAh F	Rechargeable Li-ion battery	
<b>Software Version</b>	:	V1.0		
Hardware Version	ŀ	V1.0	TOUR THE PARTY OF	
Connecting I/O Port(S)		Please refer to the User	r's Manual	

#### Note:

(1) For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.





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# (2) Channel List:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
01	5729	21	5789
02	5732	22	5792
03	5735	23	5795
04	5738	24	5798
05	5741	25	5801
06	5744	26	5804
07	5747	27	5807
08	5750	28	5810
09	5753	29	5813
10	5756	30	5816
11	5759	31	5819
12	5762	32	5822
13	5765	33	5725
14	5765	34	5828
15	5771	35	5831
16	5774	36	5834
17	5777	37	5837
18	5780	38	5840
19	5783	39	5843
20	5786	40	5846





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# 1.3 Block Diagram Showing the Configuration of System Tested

# 1.4 Description of Support Units

0.50	Adapter	WILL.	EUT	TOBY
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mon'y				
	40.37		EUT	N TODY
4037			33 6	TODY
THE STATE OF THE S				

Equipment Information						
Name	Model	FCC ID/SDOC	Manufacturer	Used "√"		
Adapter	Will Day		(1)	THE STATE OF THE S		
	Cal	ole Information				
Number	Shielded Type	Ferrite Core	Length	Note		
Cable 1			0.6M	Accessory		





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#### 1.5 Description of Test Mode

To investigate the maximum EMI emission characteristics generates from EUT, the test system was pre-scanning tested base on the consideration of following EUT operation mode or test configuration mode which possible have effect on EMI emission level. Each of these EUT operation mode(s) or test configuration mode(s) mentioned follow was evaluated respectively.

For	For Radiated Test	
Final Test Mode	Description	
Mode 1	TX Mode(01/20/39)	

#### Note:

For all test, we have verified the construction and function in typical operation. And all the test modes were carried out with the EUT in transmitting operation in maximum power with all kinds of data rate.

- (1) According to ANSI C63.10 standards, the measurements are performed at the highest, middle, lowest available channels.
- (2) During the testing procedure, the continuously transmitting with the maximum power mode was programmed by the customer.
- (3) The EUT is considered a Mobile unit; it was pre-tested on the positioned of each 3 axis, X-plane, Y-plane and Z-plane. The worst case was found positioned on X-plane. Therefore only the test data of this X-plane was used for radiated emission measurement test.

#### 1.6 Description of Test Software Setting

During testing channel & Power controlling software provided by the customer was used to control the operating channel as well as the output power level. The RF output power selection is for the setting of RF output power expected by the customer and is going to be fixed on the firmware of the final end product power parameters of RF mode.

Test Software Version		(for FW adopt OLD RF _2019_1218_Custome	# 20 E W 1
Frequency	5729 MHz	5786MHz	5846MHz
FSK	Default	Default	Default





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# 1.7 Measurement Uncertainty

The reported uncertainty of measurement y  $\pm$  U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

Test Item	Parameters	Expanded Uncertainty (U <sub>Lab</sub> )
	Level Accuracy:	
Conducted Emission	9kHz~150kHz	±3.42 dB
	150kHz to 30MHz	±3.42 dB
Radiated Emission	Level Accuracy:	±4.60 dB
Radiated Effilssion	9kHz to 30 MHz	±4.00 dB
Radiated Emission	Level Accuracy:	±4.40 dB
Nadiated Emission	30MHz to 1000 MHz	±4.40 dB
Radiated Emission	Level Accuracy:	±4.20 dB
Naulateu Liilissioii	Above 1000MHz	14.20 UD





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#### 1.8 Test Facility

The testing report were performed by the Shenzhen Toby Technology Co., Ltd., in their facilities located at 1/F., Building 6, Rundongsheng Industrial Zone, Longzhu, Xixiang, Bao'an District, Shenzhen, Guangdong, China. At the time of testing, the following bodies accredited the Laboratory:

#### **CNAS (L5813)**

The Laboratory has been accredited by CNAS to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the competence in the field of testing. And the Registration No.: CNAS L5813.

#### A2LA Certificate No.: 4750.01

The laboratory has been accredited by American Association for Laboratory Accreditation(A2LA) to ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories for the technical competence in the field of Electrical Testing. And the A2LA Certificate No.: 4750.01.FCC Accredited Test Site Number: 854351. Designation Number: CN1223.

#### IC Registration No.: (11950A)

The Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing. The site registration: Site# 11950A. CAB identifier: CN0056.





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# 2. Test Summary

FCC Part 15 Subpart C(15.249)					
Standard Section	Test Item	Test Sample(s)	Judgment	Remark	
FCC	1001110111	root oumpro(o)	o a a g o	110111011	
15.203	Antenna Requirement	202309-0169-4-2#	PASS	N/A	
15.205	Restricted Bands	202309-0169-4-1#	PASS	N/A	
15.207	AC Power Conducted Emission	202309-0169-4-1#	PASS	N/A	
15.249 &15.209	Radiated Spurious Emission	202309-0169-4-2#	PASS	N/A	
15.215(C)	20dB Bandwidth	202309-0169-4-2#	PASS	N/A	

# 3. Test Software

Test Item	Test Software	Manufacturer	Version No.	
Conducted Emission	EZ-EMC	EZ	CDI-03A2	
Radiation Emission	EZ-EMC	EZ	FA-03A2RE	
RF Conducted Measurement	MTS-8310	MWRFtest	V2.0.0.0	
RF Test System	JS1120-3	Tonscend	V3.2.22	





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# 4. Test Equipment

<b>Conducted Emissi</b>	on Test				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
EMI Test Receiver	Rohde & Schwarz	ESCI	100321	Jun. 20, 2023	Jun. 19, 2024
RF Switching Unit	Compliance Direction Systems Inc	RSU-A4	34403	Jun. 20, 2023	Jun. 19, 2024
AMN	SCHWARZBECK	NNBL 8226-2	8226-2/164	Jun. 20, 2023	Jun. 19, 2024
LISN	Rohde & Schwarz	ENV216	101131	Jun. 20, 2023	Jun. 19, 2024
Radiation Emissio	n Test				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Agilent	N9020A	MY49100060	Aug. 30, 2023	Aug. 29, 2024
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
EMI Test Receiver	Rohde & Schwarz	ESU-8	100472/008	Feb. 23, 2023	Feb. 22, 2024
Bilog Antenna	SCHWARZBECK	VULB 9168	1225	Nov. 12, 2023	Nov. 13, 2025
Horn Antenna	SCHWARZBECK	BBHA 9120 D	2463	Feb. 26, 2022	Feb.25, 2024
Horn Antenna	SCHWARZBECK	BBHA 9170	1118	Jun. 26, 2022	Jun.25, 2024
Loop Antenna	SCHWARZBECK	FMZB 1519 B	1519B-059	Jun. 26, 2022	Jun.25, 2024
HF Amplifier	Tonscend	TAP9E6343	AP21C806117	Aug. 30, 2023	Aug. 29, 2024
HF Amplifier	Tonscend	TAP051845	AP21C806141	Aug. 30, 2023	Aug. 29, 2024
HF Amplifier	Tonscend	TAP0184050	AP21C806129	Aug. 30, 2023	Aug. 29, 2024
Highpass Filter	CD	HPM-6.4/18G		N/A	N/A
Highpass Filter	CD	HPM-2.8/18G	22	N/A	N/A
Highpass Filter	XINBO	XBLBQ-HTA67(8-25G)	22052702-1	N/A	N/A
Antenna Conducte	d Emission				
Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Due Date
Spectrum Analyzer	Rohde & Schwarz	FSV40-N	102197	Jun. 20, 2023	Jun. 19, 2024
MXA Signal Analyzer	KEYSIGHT	N9020B	MY60110172	Aug. 30, 2023	Aug. 29, 2024
MXA Signal Analyzer	Agilent	N9020A	MY47380425	Aug. 30, 2023	Aug. 29, 2024
Vector Signal Generator	Agilent	N5182A	MY50141294	Aug. 30, 2023	Aug. 29, 2024
Analog Signal Generator	Agilent	N5181A	MY48180463	Aug. 30, 2023	Aug. 29, 2024
Vector Signal Generator	KEYSIGHT	N5182B	MY59101429	Aug. 30, 2023	Aug. 29, 2024
Analog Signal Generator	KEYSIGHT	N5173B	MY61252685	Aug. 30, 2023	Aug. 29, 2024
RF Control Unit	Tonsced	JS0806-2	21F8060439	Aug. 30, 2023	Aug. 29, 2024
Band Reject Filter Group	Tonsced	JS0806-F	21D8060414	Jun. 20, 2023	Jun. 19, 2024
Power Control Box	Tonsced	JS0806-4ADC	21C8060387	N/A	N/A
Temperature and Humidity Chamber	ZhengHang	ZH-QTH-1500	ZH2107264	Jun. 20, 2023	Jun. 19, 2024



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### 5. Conducted Emission Test

#### 4.1 Test Standard and Limit

4.1.1Test Standard FCC Part 15.207

#### 4.1.2 Test Limit

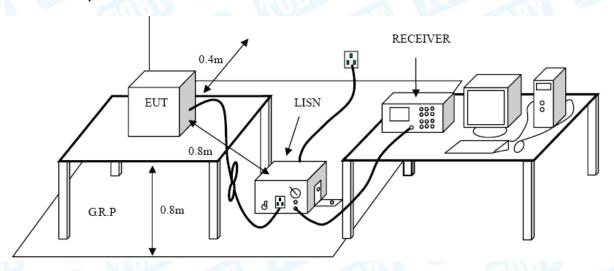
#### **Conducted Emission Test Limit**

	Maximum RF Line Voltage (dBμV)				
Frequency	Quasi-peak Level	Average Level			
150kHz~500kHz	66 ~ 56 *	56 ~ 46 *			
500kHz~5MHz	56	46			
5MHz~30MHz	60	50			

#### Notes:

- (1) \*Decreasing linearly with logarithm of the frequency.
- (2) The lower limit shall apply at the transition frequencies.
- (3) The limit decrease in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

#### 4.2 Test Setup



#### 4.3 Test Procedure

The EUT was placed 0.8 meters from the horizontal ground plane with EUT being connected to the power mains through a line impedance stabilization network (LISN). All other support equipments powered from additional LISN(s). The LISN provide 50 Ohm/50uH of coupling impedance for the measuring instrument.

Interconnecting cables that hang closer than 40 cm to the ground plane shall be folded back





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and forth in the center forming a bundle 30 to 40 cm long.

I/O cables that are not connected to a peripheral shall be bundled in the center. The end of the cable may be terminated, if required, using the correct terminating impedance. The overall length shall not exceed 1 m.

LISN is at least 80 cm from nearest part of EUT chassis.

The bandwidth of EMI test receiver is set at 9kHz, and the test frequency band is from 0.15MHz to 30MHz.

#### 4.4 EUT Operating Mode

Please refer to the description of test mode.

#### 4.5 Test Data

Please refer to the Attachment A.





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# 6. Radiated Emission Test

### 5.1 Test Standard and Limit

5.1.1 Test Standard FCC Part 15.209

5.1.2 Test Limit

#### Radiated Emission Limit (9kHz~1000MHz)

Frequency (MHz	Field Strength (microvolt/meter)	Measurement Distance (meters)
0.009~0.490	2400/F(KHz)	300
0.490~1.705	24000/F(KHz)	30
1.705~30.0	30	30
30~88	100	3
88~216	150	3
216~960	200	3
Above 960	500	3

#### Radiated Emission Limit (Above 1000MHz)

Frequency	Distance Meters (at 3m)			
(MHz)	Peak	Average		
Above 1000	74	54		

#### Note:

- (1) The tighter limit applies at the band edges.
- (2) Emission Level(dBuV/m)=20log Emission Level(Uv/m)

#### Limits of radiated emission measurement (15.249)

FCC Part 15 (15.249), Subpart C					
Limit Frequency Range (MHz)					
Field strength of fundamental	E70E E07E				
50000 μV/m (94 dBμV/m) @ 3 m	5725~5875				
Field strength of harmonics	Dolow E705 and Above 5075				
500 μV/m (54 dBμV/m) @ 3 m	Below 5725 and Above 5875				





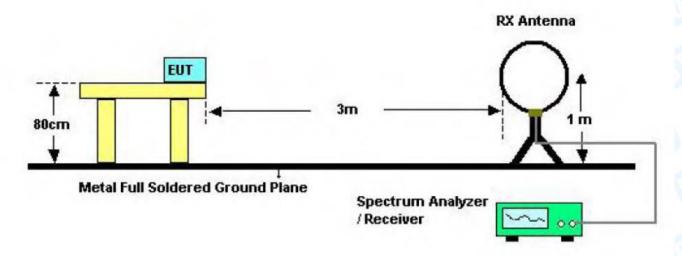


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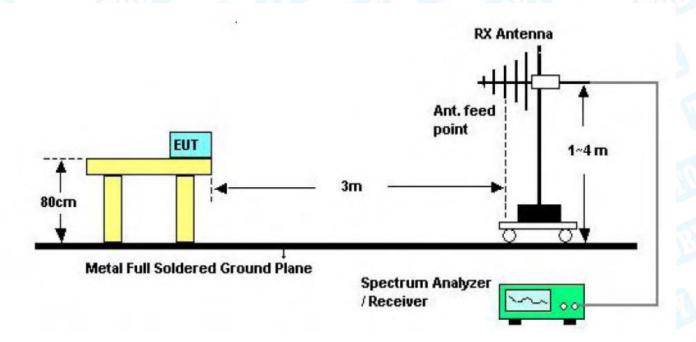
# Restricted bands requirement for equipment operating in 902MHz to 928 MHz (15.249)

Restricted Frequency Band (MHz)	(dBuV/m)(at 3 M)
5725~5875	Attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in 15.209, whichever is the lesser attenuation

## 5.2 Test Setup



Below 30MHz Test Setup

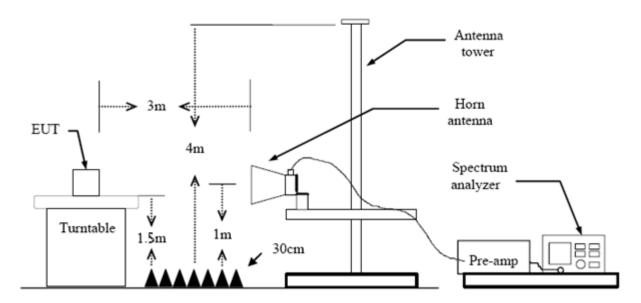






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#### Bellow 1000MHz Test Setup



Above 1GHz Test Setup

#### 5.3 Test Procedure

- (1) The measuring distance of 3m shall be used for measurements at frequency Below 1GHz. The EUT was placed on a rotating 0.8m high above ground, the table was rotated 360 degrees to determine the position of the highest radiation.
- (2) Measurements at frequency above 1GHz. The EUT was placed on a rotating 1.5m high above the ground. RF absorbers covered the ground plane with a minimum area of 3.0m by 3.0m between the EUT and measurement receiver antenna. The RF absorber shall not exceed 30cm in high above the conducting floor. The table was rotated 360 degrees to determine the position of the highest radiation.
- (3) The Test antenna shall vary between 1m and 4m, Both Horizontal and Vertical antenna are set to make measurement.
- (4) The initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured.
- (5) If the Peak Mode measured value compliance with and lower than Quasi Peak Mode Limit Bellow 1 GHz, the EUT shall be deemed to meet QP Limits and then no additional QP Mode measurement performed. But the Peak Value and average value both need to comply with applicable limit above 1 GHz.
- (6) Testing frequency range below 1GHz the measuring instrument use VBW=120 kHz with Quasi-peak detection.
- (7) Testing frequency range above 1GHz the measuring instrument use RBW=1 MHz and VBW=3 MHz with Peak Detector for Peak Values, and use RBW=1 MHz and VBW=10 Hz with Peak Detector for Average Values.





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(8) For the actual test configuration, please see the test setup photo.

## 5.4 EUT Operating Condition

The EUT was set to Continual Transmitting in maximum power, and new batteries are used during testing.

#### 5.5 Test Data

Please refer to the Attachment B.

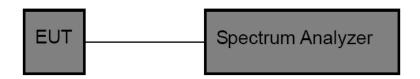




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### 7. Bandwidth Test

#### 6.1 Test Setup



#### 6.2 Test Procedure

- (1) The EUT was directly connected to the spectrum analyzer and antenna output port as show in the block diagram above.
- (2) Spectrum Setting:

Bandwidth: RBW=100 kHz, VBW=300kHz.

(3) The bandwidth is measured at an amplitude level reduced 20dB from the reference level. The reference level is the level of the highest amplitude signal observed from the transmitter at the fundamental frequency. Once the reference level is established, the equipment is conditioned with typical modulating signal to produce the worst –case (i.e the widest) bandwidth.

#### 6.3 EUT Operating Condition

The EUT was set to continuously transmitting for the Bandwidth Test.

#### 6.4 Test Data

Please refer to the Attachment C.





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# 8. Antenna Requirement

### 7.1 Standard Requirement

7.1.1 Standard FCC Part 15.203

#### 7.1.2 Requirement

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this Section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### 7.2 Antenna Connected Construction

The gains of the antenna used for transmitting is 3.43dBi, and the antenna de-signed with permanent attachment and no consideration of replacement. Please see the EUT photo for details.

#### 7.3 Result

The EUT antenna is PCB antenna Antenna. It complies with the standard requirement.

Antenna Type					
⊠Permanent attached antenna					
Unique connector antenna					
☐Professional installation antenna	IO(p)				

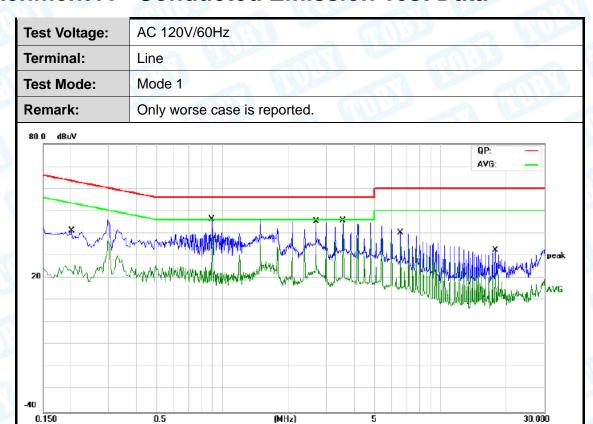


Humidity:



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# **Attachment A-- Conducted Emission Test Data**



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1		0.2020	20.57	9.72	30.29	63.52	-33.23	QP
2		0.2020	9.18	9.72	18.90	53.52	-34.62	AVG
3		0.8980	33.13	10.01	43.14	56.00	-12.86	QP
4	*	0.8980	27.87	10.01	37.88	46.00	-8.12	AVG
5		2.6859	30.96	10.12	41.08	56.00	-14.92	QP
6		2.6859	25.45	10.12	35.57	46.00	-10.43	AVG
7		3.5819	31.92	9.99	41.91	56.00	-14.09	QP
8		3.5819	26.56	9.99	36.55	46.00	-9.45	AVG
9		6.5659	23.03	9.85	32.88	60.00	-27.12	QP
10		6.5659	15.25	9.85	25.10	50.00	-24.90	AVG
11		17.9139	8.96	10.38	19.34	60.00	-40.66	QP
12		17.9139	0.90	10.38	11.28	50.00	-38.72	AVG

#### Remark:

Temperature:

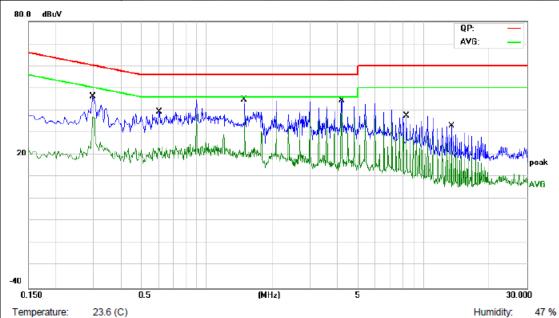
23.6 (C)

- 1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)





Test Voltage:	AC 120V/60Hz
Terminal:	Neutral
Test Mode:	Mode 1
Remark:	Only worse case is reported.
80.0 dBuV	



No. M	/lk. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector
1	0.2977	33.55	9.80	43.35	60.30	-16.95	QP
2	0.2977	27.76	9.80	37.56	50.30	-12.74	AVG
3	0.6018	22.68	10.00	32.68	56.00	-23.32	QP
4	0.6018	12.50	10.00	22.50	46.00	-23.50	AVG
5	1.4939	33.38	9.98	43.36	56.00	-12.64	QP
6	1.4939	28.54	9.98	38.52	46.00	-7.48	AVG
7	4.1817	34.37	9.80	44.17	56.00	-11.83	QP
8 *	4.1817	29.41	9.80	39.21	46.00	-6.79	AVG
9	8.3619	23.74	9.88	33.62	60.00	-26.38	QP
10	8.3619	17.87	9.88	27.75	50.00	-22.25	AVG
11	13.4379	14.77	10.09	24.86	60.00	-35.14	QP
12	13.4379	6.91	10.09	17.00	50.00	-33.00	AVG

- Remark:
  1. Corr. Factor (dB) = LISN Factor (dB) + Cable Loss (dB)
- 2. Margin (dB) =QuasiPeak/Average (dBuV)-Limit (dBuV)





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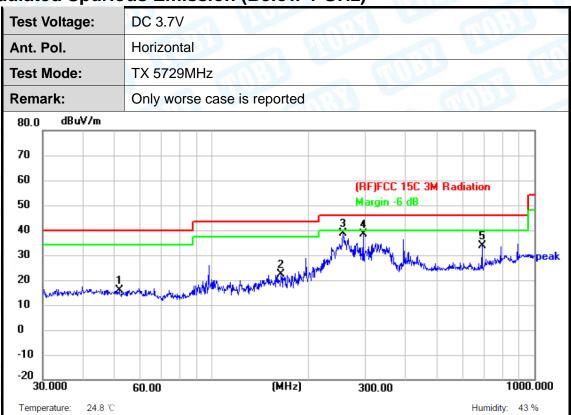
# **Attachment B-- Radiated Emission Test Data**

### Radiated Spurious Emission (9 KHz~30 MHz)

From 9 KHz to 30 MHz: Conclusion: PASS

Note: The amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.

Radiated Spurious Emission (Below 1 GHz)



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	51.8430	40.55	-24.50	16.05	40.00	-23.95	peak
2	163.7550	44.16	-21.67	22.49	43.50	-21.01	peak
3 *	255.6231	61.69	-22.90	38.79	46.00	-7.21	peak
4	295.1468	59.64	-21.37	38.27	46.00	-7.73	peak
5	689.5644	47.67	-14.05	33.62	46.00	-12.38	peak





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Test Volta	ge:	DC 3.7V		Mills					
Ant. Pol.		Vertical	ertical						
Test Mode	<b>9</b> :	TX 5729	MHz		CITI I	1:33			
Remark:		Only wo	rse case is	reported	O U				
80.0 dl	3uV/m								
70 60 50 40 30 20 10	1	2	3 Language Marie	Maryar Profession of Secretarial	(RF)FCC 15C 3M I Margin -6 dB				
-10 -20 30.000	: 24.8 °C	60.00		(MHz)	300.00	1000.000 Humidity: 43 %			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	42.7495	46.74	-23.98	22.76	40.00	-17.24	peak
2	58.4074	42.55	-24.10	18.45	40.00	-21.55	peak
3	94.7600	45.59	-26.07	19.52	43.50	-23.98	peak
4	163.7550	42.46	-21.67	20.79	43.50	-22.71	peak
5	322.1885	47.06	-20.43	26.63	46.00	-19.37	peak
6 *	887.6098	40.44	-8.56	31.88	46.00	-14.12	peak

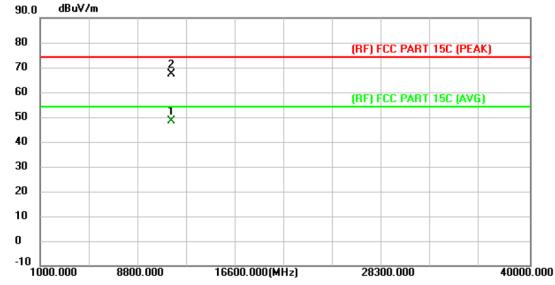




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### Radiated Spurious Emission (Above 1 GHz)

- 1		
	Test Voltage:	DC 3.7V
	Ant. Pol.	Horizontal
	Test Mode:	TX 5729MHz
	Remark:	No report for the emission which more than 10 dB below the
		prescribed limit.



Humidity: 49 % Temperature:

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11458.239	47.88	0.68	48.56	54.00	-5.44	AVG
2	11458.789	66.56	0.70	67.26	74.00	-6.74	peak

#### Remark:

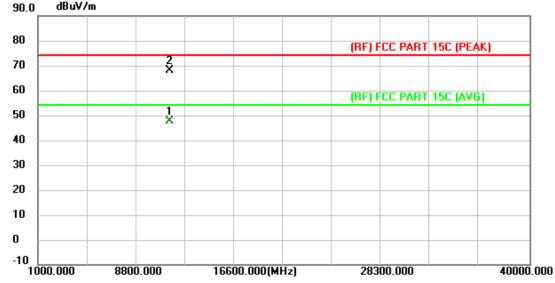
- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.
- 5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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4	Test Voltage:	DC 3.7V
V	Ant. Pol.	Vertical
	Test Mode:	TX 5729MHz
7	Remark:	No report for the emission which more than 10 dB below the
•		prescribed limit.
	00 0 JD-3/J-	



23.5 ℃ Humidity: 49 % Temperature:

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	11458.342	46.82	0.70	47.52	54.00	-6.48	AVG
2 *	11458.691	67.28	0.70	67.98	74.00	-6.02	peak

#### Remark:

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

  5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





Humidity: 49 %

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Test Voltage:	DC 3.7V	DC 3.7V					
Ant. Pol.	Horizontal		WW TO THE				
Test Mode:	TX 5786MH	Hz		MBS			
Remark:		No report for the emission which more than 10 dB below the prescribed limit.					
90.0 dBuV/m							
80			(RF) FCC PART	( 15C (PEAK)			
70	1 X						
60			(RF) FCC PART	15C (AVG)			
50	×						
40							
30							
10							
0							
-10 1000.000	8800.000	16600.000(MHz)	28300.000	400			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1	11572.153	67.01	0.84	67.85	74.00	-6.15	peak
2 *	11572.394	47.69	0.84	48.53	54.00	-5.47	AVG

#### Remark:

Temperature:

23.5 ℃

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
   Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

  5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Test Voltage:	DC 3.7V	DC 3.7V					
Ant. Pol.	Vertical	Vertical					
Test Mode:	TX 5786M	lHz		W. D.			
Remark:		No report for the emission which more than 10 dB below the prescribed limit.					
90.0 dBuV/n	n						
80			(RF) FCC PART	15C (PEAK)			
70	1 ×		()	155 (121.15)			
60			(RF) FCC PART	15C (AVG)			
50	2 ×						
40							
30							
20							
10							
0							
-10 1000.000	8800.000	16600.000(MHz)	28300.000	40000.00			

Temperature:	23.5 ℃	Humidity:	49 %
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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11572.692	66.99	0.84	67.83	74.00	-6.17	peak
2	11572.867	46.45	0.84	47.29	54.00	-6.71	AVG

#### Remark:

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
   Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

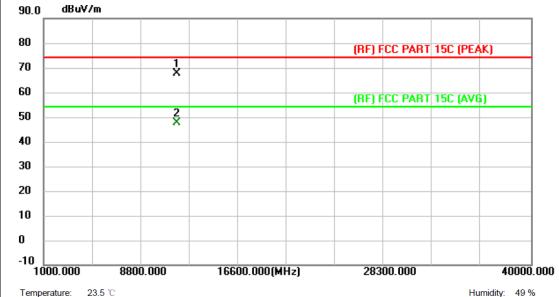
  5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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Test Voltage:	DC 3.7V			
Ant. Pol.	Horizontal			
Test Mode:	TX 5846MHz			
Remark: No report for the emission which more than 10 dB below the				
	prescribed limit.			



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)		Margin (dB)	Detector
1 *	11692.158	66.61	1.03	67.64	74.00	-6.36	peak
2	11692.489	46.59	1.03	47.62	54.00	-6.38	AVG

#### Remark:

- Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
   Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
- Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
   The tests evaluated1-26.5GHz, The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

  5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.

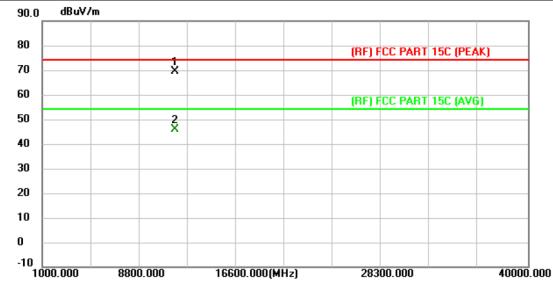




Humidity: 49 %

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	Test Voltage:	DC 3.7V
V B	Ant. Pol.	Vertical
	Test Mode:	TX 5846MHz
Remark: No report for the emission which more than 10 dB below the		
		prescribed limit.



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector

	(1711 12)	(abav)	(GD/III)	(abav/iii)	(abav/iii)	(GD)	
1 *	11692.436	68.53	1.03	69.56	74.00	-4.44	peak
2	11692.723	44.86	1.03	45.89	54.00	-8.11	AVG

#### Remark:

Temperature:

23.5 ℃

- 1. Corr. = Antenna Factor (dB/m) + Cable Loss (dB)
  2. Peak/AVG (dBμV/m)= Corr. (dB/m)+ Read Level (dBμV)
  3. Margin (dB) = Peak/AVG (dBμV/m)-Limit PK/AVG(dBμV/m)
  4. The tests evaluated1-26.5GHz,The testing has been conformed to the 10th harmonic of the highest fundamental frequency.

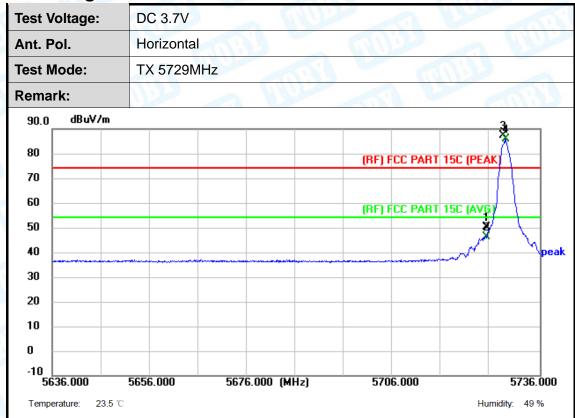
  5. No report for the emission which more than 20dB below the prescribed limit.
- 6. The peak value < average limit, So only show the peak value.





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# Field Strength of the Fundamental

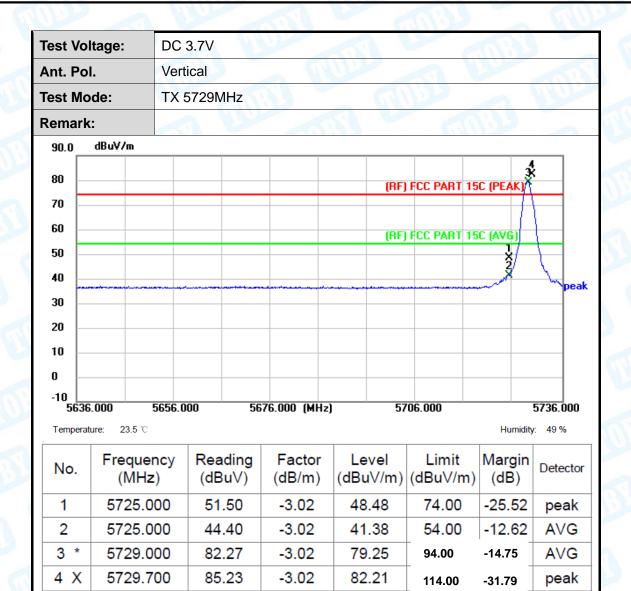


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	5725.000	53.30	-3.02	50.28	74.00	-23.72	peak
2	5725.000	49.32	-3.02	46.30	54.00	-7.70	AVG
3 X	5728.500	90.29	-3.03	87.26	114.00	-26.74	peak
4 *	5729.000	88.77	-3.02	85.75	94.00	-8.25	AVG





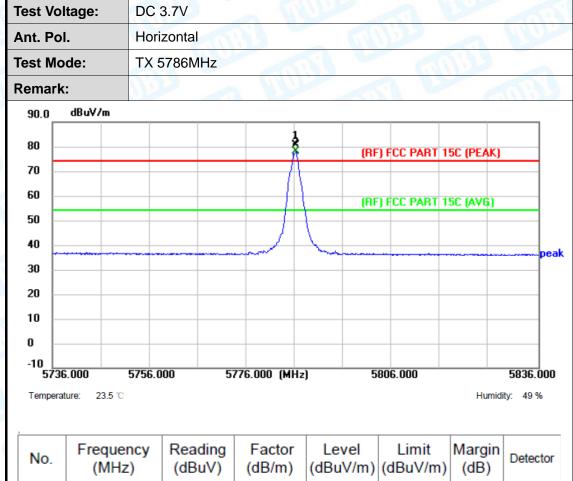
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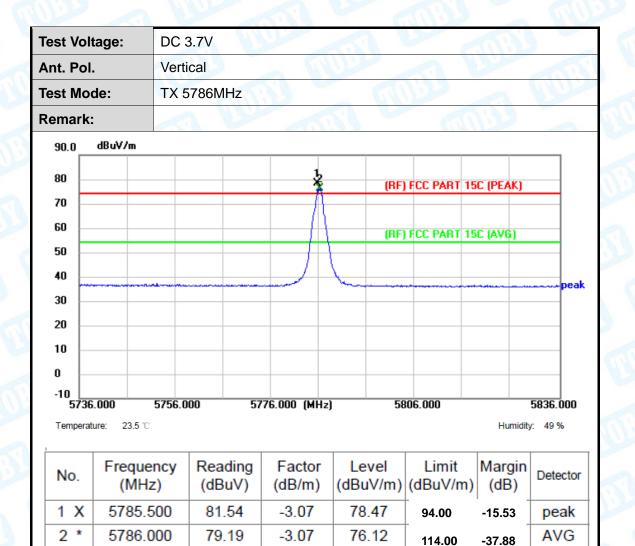


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 X	5786.100	83.55	-3.07	80.48	114.00	-33.52	peak
2 *	5786.100	81.18	-3.07	78.11	94.00	-15.89	AVG





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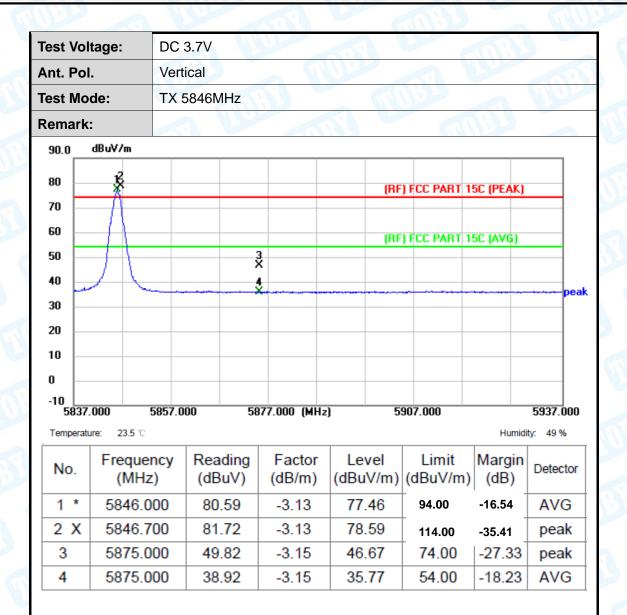
Test Voltage:	DC 3.7V	The same				
Ant. Pol.	nt. Pol. Horizontal					
Test Mode:	TX 5846MHz		)			
Remark:	11033	Was and the				
90.0 dBuV/m						
80 🕺		(RF) FCC PART 15C (PE	AK)			
70						
60		(RF) FCC PART 15C (AV	/G)			
50	3 X					
40			peal			
30						
20						
10						
0						
-10 5839.000	5859.000 5879.000	(MHz) 5909.000	5939.000			

No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1 *	5846.000	79.74	-3.13	76.61	94.00	-17.39	AVG
2 X	5846.600	83.90	-3.13	80.77	114.00	-33.23	peak
3	5875.000	49.85	-3.15	46.70	74.00	-27.30	peak
4	5875.000	39.00	-3.15	35.85	54.00	-18.15	AVG





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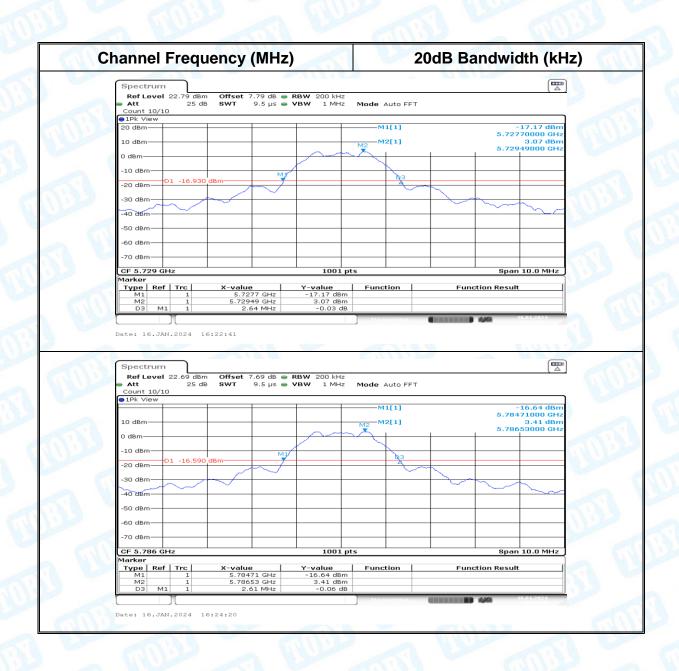




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## **Attachment C--Bandwidth Test Data**

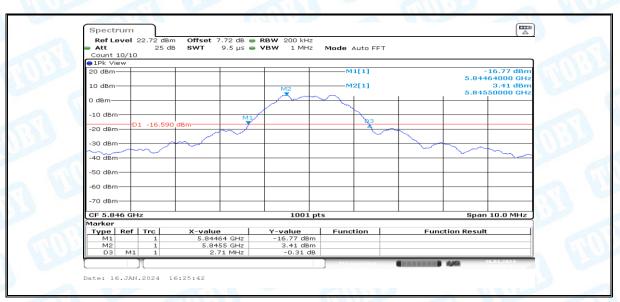
Channel Frequency (MHz)	20dB Bandwidth (MHz)
5729	2.64
5786	2.61
5846	2.71







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----END OF THE REPORT----

